GetReskilled

The Ultimate Guide to Finding a Job in Life Science in Puerto Rico

Contents

Introduction

Are you thinking of a mid career change?

Do you want to know more about finding a job with one of Puerto Rico's highly successful pharmaceutical and medical device manufacturing companies?

If so, we wrote this eBook for you. It also contains lots of relevant information for those who already work in this industry or want to take the next step along your career path. You'll be able to find out what types of jobs are available and what you need to do to get them based on your qualifications and work experience to date.

As a matter of fact, if you already have a technical background, you probably have far more relevant knowledge and experience than you realize. The key is identifying that experience, filling your knowledge gaps and having the courage to make the change.

Let's begin with an overview of this sector.

Part 1: Life Sciences Manufacturing in Puerto Rico - Why You Should Reskill

"I would highly recommend this course to everyone! Before taking this course I didn`t know anything about pharmaceutical industry. I wanted to try something different and never regretted choosing this one. It helped me not only to enhance my knowledge, but also boosted my confidence and faith to find employment again. I found that pace of course was good, lecturers were very good and professional, overall very good experience."

Vesna Dimitrijevic - BioPharmaChem
(Graduated November 2012)

Chapter 1 - Why consider a change of career to pharma or medical devices?

Puerto Rico is an important global centre of excellence for manufacturing safe medicines and medical devices. Whether you're already in the industry and are looking to take the next step up, or you have technical and manufacturing experience from a different industry, reskilling could be just what your career needs to move forward.

1. An Established Reputation

- 19,600 people are directly employed, a further 50,000 are employed indirectly
- Contributes over a quarter of Gross Domestic Product
- Responsible for 57% of Puerto Rico's exports in 2012
- 12 of the world's top 20 pharma companies have manufacturing facilities

There are many reasons why the Life Sciences companies continue to invest in Puerto Rico and why, despite difficult general economic conditions, these industries are providing excellent career opportunities to those with the right skillset.

1. An Established Reputation

There is a well established history of medical device and pharmaceutical manufacturing, spanning five decades, on the island. The first pharmaceutical plant opened in 1957 and today, Puerto Rico plays host to some of the biggest companies from across the world. Many of these large companies have more than one plant on the island, which is testament to the excellent working environment and relationships Puerto Rico has built with this industry.

2. It supplies well paying jobs

Puerto Rico's long and prosperous history with pharmaceutical manufacturing companies means manufacturing staff are highly experienced and are well versed in the regulatory environments required for manufacturing safe medicines and medical devices across all global regulatory bodies.

There are 19,600 people directly employed in these industries - representing 25% of manufacturing employment across the entire island. Production salaries in this industry are, on average, within the highest across the island.

A highly skilled employee base is a big draw to companies, and Puerto Rico's workforce is highly educated with approximately 60% of life science employees having a minimum qualification of a Bachelor's degree. Likewise, for experienced workers without a degree, there are opportunities to certify their knowledge with a Bachelor of Science degree and move up the career ladder as a Professional within their company. It's never too late to join them, as with technical experience, reskilling into this industry is entirely possible.

3. Prime Location

As a Commonwealth of the United States, Puerto Rico offers companies a truly unique environment.

Only a few short hours to mainland U.S, the largest Life Sciences market in the world, and the ease of free trade there make it extremely appealing - 80% of pharmaceuticals manufactured here are used within the U.S. Further to that, the island is actually well positioned midway between North and South America, meaning that it can serve both extremely well.

Falling under U.S. jurisdiction means that Puerto Rico is homeland secure as well as offering the protection of U.S. intellectual property laws. Providing further stability to the Life Sciences industry, is the FDA approval that is required for all plants.

4. Taxation Incentives

Whilst affiliation to the U.S. provides these benefits, as a Commonwealth, Puerto Rico also affords the flexibility of a foreign taxation system. This allows the Puerto Rican government to implement tax incentives to help welcome companies.

Tax incentives were a large contributing factor in the establishment of Puerto Rico's Life Sciences manufacturing community. The Internal Revenue Code section 936 was a big initial draw to companies looking to minimize their tax bills during the 20th century. In 1996, it was announced that this section was to be changed, and it was finally phased out by 2006.

Despite this, Puerto Rico remains an appealing destination for companies - the maximum corporate taxes are now 30%. The Puerto Rican government is also doing what it can regarding tax incentives to continue to attract the world's Life Sciences companies - including a focus on research and development and manufacturing activities as well as rewarding early job creation.

5. Adaptation and Forward Planning

Puerto Rico continues to adapt and change to reflect the Life Sciences marketplace. Today, there is a focus towards research and development activities as well as biotechnology, whilst at the same time continuing to cater for the pharmaceutical and medical device manufacturing it is so well-respected for.

Biologics are an ever-increasing proportion of the Life Sciences industries, and the island is currently home to the world's largest recombinant human insulin modular biotechnology plant. The proven ability of the Puerto Rican workforce to adapt and learn the new skills needed for emerging technologies is an extremely important factor for the long term security of these existing companies.

6. Cooperation and Support Organizations

As well as already established companies on the island, there is a government-owned corporation - Puerto Rico Industrial Development Company (PRIDCO) - whose role is to promote the island to companies across the world. They work closely with companies who are looking to establish themselves on the island for the first time or with companies already here and who are looking to expand.

PRIDCO can offer specialist advice to help companies maximize business benefits and will assign project managers to ensure all questions are efficiently answered throughout the development process. Manufacturing and life sciences are areas of specific interest defined by PRIDCO.

Over the last few years, there have been some high-profile plant closures, but these plants are often acquired quickly by another company with many staff making the transition as well. On the other hand, there have also been some very high-profile new project announcements over the last few years which promise new jobs into the industry. This is expanded on in further detail in “Chapter 2”.

With dedicated organizations whose specific remit is keeping Puerto Rico at the forefront of the Life Sciences Industry, this field is flourishing despite the difficult economic environment of the last few years.

With an established history, a large and varied portfolio of some of the world’s biggest Life Sciences companies and specific agencies in place to help attract new business and expansion - this is a great place to base a career in pharmaceutical manufacturing. Whether you’re looking to reskill into the industry or to advance your existing career within it, a skills boost can elevate you to the next step in your career.

Chapter 2 - What jobs are available?

If you are considering a change of career, one of the most important factors that will influence your decision is the stability of the industry you want to move into. It is a little simplistic to suggest that the world is always going to need pharmaceutical and medical device companies, but it is true. There will always be the demand, and as an industry we need to ensure there will always be the supply of safe, effective, inexpensive medication. Especially now, as we find ourselves with an increasing life expectancy and a growing elderly population, the need for effective healthcare has never been greater.

As there will always be a strong worldwide demand for pharmaceutical and medical device products, Puerto Rico is focussed on being the country of choice to provide these.

There have been several high-profile new projects and new job opportunities announced over the last few years, here are the highlights:

- AbbVie announced $30 million expansion to a preexisting site in March 2015 - this will create 100 jobs over the next 2 years.
- Actavis announced $48 million expansion of the recently acquired Warner Chilcott plants in Manati and Fajardo. This is expected to create 300 jobs over the next 3 years.
- Bristol-Myers Squibb announced a $200 million expansion of its Humacao site in 2013 - 100 jobs were created.
- Coopervision announced a site expansion in 2013 that is expected to lead to 350 new jobs.
- CR Bard announced $43 million investment in 2012 for expansion at its site near Las Piedras. It expects 200 new jobs over the next 5 years.

- Eli Lilly announced major expansion plans of their insulin production sites in November 2013, including their Puerto Rico site. Expansion runs through 2017.

- Medtronic announce expansion costing $6 million across two sites in Dec 2013. 150 new jobs are expected over 3 years.

- Romark Laboratories announced the building of a new plant in 2014. The $110 investment is expected to create 200 jobs over the next 3 years.

Part 2: ReSkilling - preparing you for the job market

"The courses are delivered to a very high professional standard with both the tutors & administration staff being very helpful & encouraging along the journey, the course videos & notes were very easily followed along with weekly webinars in which we could engage with the tutors & tap further into their knowledge & experience. Studying online gives you the time to do the course in your own time yet with assignment deadlines this made you disciplined to meet the deadlines set. I would have no hesitation in recommending these courses to anyone wishing to gain an education in the pharmaceutical sector."

Ronan Balfe - BioPharmaChem
(Graduated November 2012);
eValidation (Graduated June 2014)

Chapter 3 - What training will I need?

The number of courses you will require to transition into the Life Sciences Industry depends upon:

- **Your previous work experience.** Do you have work related experience in a manufacturing environment?

- **Your academic qualifications.** Do you have a technical qualification in a science or engineering discipline?

- **Your career goals and aspirations.** Are you looking for an entry-level role in manufacturing, science, quality, engineering/manufacturing or a logistics role? Are you looking for a validation role or an automation role? Are you looking for a more advanced career track in manufacturing, quality or engineering/ maintenance?

Here is a breakdown of the types of academically accredited certificates and degrees we offer and the types of jobs you could potentially apply for once you have completed these programs. You can cross reference these lists with the previous chapter for a more detailed description of what is entailed in each job and the predicted salary associated with it.

Certificate in e(Bio) PharmaChem (DT 698)

This e(Bio) PharmaChem CPD Certificate is academically accredited by the Dublin Institute of Technology in Ireland and will prepare you to transition into an operator/ technician role within the highly regulated pharmaceutical and medical device manufacturing industry.

- You will develop an understanding of the Knowledge, Skills and Behavior necessary to manufacture safe medicines for the public.

- You will also learn about GMP Enforcement in this highly regulated industry sector, why it is so strict and why it is so important.

The program consists of 3 modules and takes about 5 months full-time, or 8 months part-time, to complete.

Career Opportunities

You will be able to apply for entry-level roles **(contingent on your previous work experience)** in the following areas when you get halfway through this course - as you'll have enough technical knowledge to impress employers at an interview.

Entry Level Roles		
Manufacturing	**Science**	**Quality**
Manufacturing Technical Specialist	Chemist	Quality Assurance (QA) Specialist
Manufacturing Operations Associate	Laboratory Analyst	Quality Control (QC) Specialist
Technician (Manufacturing/ Production)	Laboratory Technician	Project Quality Engineer
Assembler		Quality Engineer
Chemical Process Technician		Associate Quality Engineer
Packing Machine Operator		

Entry Level Roles	
Engineering/ Maintenance	**Logistics**
Process Engineer	Procurement Specialist
Engineer (Projects)	Logistics Specialist
Engineer (Production/Chemical)	
Associate Engineer	
Electrician	
Electronic Technician	
HVAC Supervisor	
HVAC Technician	
Industrial Engineer	
Instrumentation Engineer	
Maintenance Supervisor	
Maintenance Technician	

See Chapter 12 for more details on job roles and salaries.

Certificate in e-Validation (DT 758A)

This e-Validation CPD Certificate is academically accredited by the Dublin Institute of Technology in Ireland and will prepare you for a validation role within the pharmaceutical and medical device manufacturing industry. This course is normally taken upon successful completion of the previously mentioned “eBioPharmaChem” Program.

- You will develop an understanding of how to write a Validation Master Plan, prepare a Process Validation protocol and develop a Performance Qualification test script based on the key process measurements of a URS (User Requirement Specification).
- You will also learn about clean air and purified water systems, so as to ensure that these critical systems are fit-for-purpose.

The program consists of 3 modules and takes about 5 months full-time, or 8 months part-time, to complete.

Computer System Validation Course (CSV)

If you combine the aforementioned e-Validation CPD Certificate with the 10 Week Part-Time Course on Computer System Validation (CSV), you will get a thorough understanding of how the CSV process fits into your Software Life Cycle and the purpose of each validation deliverable, which means you’ll be able to apply for Automation Roles.

Career Opportunities in Validation and Automation

You will be able to apply for the following roles in validation and automation

Technical Roles	
Validation	**Automation**
Quality Coordinator	Automation Engineer
Validation Engineer	Systems Engineer
Quality Engineer	Applications Engineer
Document Management Specialist	Computer Operations Specialist

See Chapter 12 for more details on job roles and salaries.

Bachelor of Science (BSc) Degree in Manufacture of Medicinal Products (DT 291)

This Bachelor of Science program is designed to provide you with the necessary knowledge and skills to cross train or upskill into roles in the Life Sciences manufacturing sector. This is, in the main, an online program delivered using the DIT e-learning platform, 'Blackboard'.

The Degree program is comprised of 12 modules with 3 modules taken every year over 4 years. Delivery is part-time online (10-15 hours per week) and takes 30 weeks each year to complete. Students who successfully complete all 4 Semesters will be awarded a Bachelor of Science (BSc) in Manufacture of Medicinal Products.

This Bachelor of Science degree will:

- Provide education at undergraduate level in aspects of Production, Engineering, Quality and Validation that are relevant to those currently working in, or wishing to work in the manufacture of Active Pharmaceutical Ingredients, Drug Products, Biopharmaceuticals and Medical Devices (collectively referred to as Medicinal Products, or Life Sciences).

- Provide education to give candidates a strong grounding in modern pharmaceutical science and engineering concepts with a view to the Equipment, Processes, Facilities and Systems used in the manufacture of Life Sciences Products in line with the various worldwide regulatory and current Good Manufacturing Practices (cGMP) guidelines.

The learning outcomes on successful completion of this program will be:

- Have a detailed knowledge of the Manufacture of Life Sciences Products and a broad knowledge of the fundamental science underpinning this.

- Have a practical knowledge of the regulatory environment in which Life Sciences Products are manufactured.

- Have demonstrated the ability to work effectively in a team across Production, Engineering Quality and Validation.

Career Opportunities

You will be able to apply for a more advanced role in the following areas:

More Advanced Roles		
Manufacturing	**Quality**	**Engineering**
Operations Supervisor	Regulatory Affairs Specialist	Senior Industrial Engineer
Production Executive	Quality Coordinator	
Pharmacist	Senior Quality Control Engineer	

See Chapter 12 - Job Roles and Salaries for more details

"I have really enjoyed the course. The course content was very detailed and way surpassed my expectation. While the course was challenging, the online support and access was exceptional. I am really looking forward to progressing to the follow-on/specialization course"
Darren Deehan - BioPharmaChem
(Graduated February 2014)

Chapter 4 - What is it like studying online?

Online Learning Done Differently
Or Why this is an Online Course you will finish!

- Each week, you'll complete a series of videos, quizzes, interactive activities and projects through our online platform – available 24/7.

- Online courses can start off great, but staying motivated can be a challenge. So, you'll get weekly feedback reports (and emails or phone calls if you fall behind!) to keep you on track until you finish the course.

- Because it's online, there are no airfares, hotel fees or long commutes. Study at home after the kids have gone to bed.

Our Top Tips for Being a Good Online Student

- **Be realistic** - online classes take the same amount of work as classes you attend in person; you need to be just as serious about it. There are no shortcuts so you need to be able to dedicate the time it needs, don't underestimate it.

- **Set goals** - setting realistic goals is an important part of online study, ensuring that you're keeping on top of the workload and keeping yourself motivated as you progress. Just make sure you stick to your goals or reassess them if you're finding it hard to do so (Were you over-ambitious? Do you need to set aside more time? etc.).

- **Make a plan** - schedule time for your 'classes', make this a time when you can focus with the least amount of distractions. Be realistic and try to keep to a routine. Make a study plan, divide your work into bite-size chunks to make it more manageable. Schedule in regular breaks to ensure you're keeping your attention at its highest and giving yourself time to process what you're learning. Just ensure that you keep strict 'back to work' rules and don't get sidetracked by something else whilst on your break.

- **Create a good work environment** - being in charge of your own work environment can be very beneficial to learning, you can do everything necessary to make yourself comfortable and create a space where you feel ready to work. It does also mean that you're in charge of keeping out the distractions - try to be disciplined about leaving your phone to one side, leaving the housework alone and not getting distracted on the internet. Treat your assigned study time like you were in a classroom, don't do anything you wouldn't do there.

- **Use all the resources available to you** - although you may study by yourself, you are certainly not alone on your course; get involved with the various support and discussion aspects of your program.

- **Self motivation is key** - keep the end goal in mind. If you find yourself struggling with procrastination or lacking in motivation on a given day, always keep your ultimate goals in mind. Remind yourself what improvement you're looking to achieve by taking the course.

- **KEEP IN CONTACT** - the main reason students don't successfully complete courses is because they don't keep in contact with their course co-ordinator. We are here to help, but we can only help if you tell us what is happening in your life. Call, Email, Facebook us, but keep us informed on how you are coping with the course and the impact it is having on your life.

"The benefits of the series of Employment Coaching webinars were also a pivotal aspect of the courses I successfully completed."

Noel O'Brien - BioPharmaChem (Graduated June 2013); eValidation (Graduated February 2014)

Chapter 5 - What help will you give me to find a job?

Your Job Hunt is the most important part of your transition into the industry and we are here to help. In a series of 10 workshops, we de-mystify the job hunting process. The course is written by recruiters and, therefore, it is all about getting you into the mindset of those who will be hiring you - how to create a Resume that people actually want to read, for example. The course breaks down into three segments - “Resume - Getting it right”, “Interview - It’s All About that Prep, About that Prep, No Trouble” and “Networking - How to Think Like a Recruiter”.

Here is a rough breakdown of what you will cover in each section:

Resume - Getting it Right:

- How to Format Your Resume. What should you do?:
    - Make your audience’s job easy
    - Think about who is reading your Resume
    - Never send the same Resume twice
    - Remember this is a business document
    - Mirror the Language of the Ad
    - What is Your Best Friend? - Your Highlighter!

- Writing a Personal Profile:
    - How to write 8 lines about yourself - Who are you?
    - Why are you the perfect candidate for this job?
    - How to use their own language to your advantage

- Targeting Your Resume to a Specific Role:
    - How to adapt Your Personal Profile

- Identifying Your Key Skills
  - How to complete a Skills Audit?
  - How do you reflect on your key skills and then match it to what people are looking for in the job role?
  - How Skills Auditing makes Interviewing Easy
- Crafting Bullet Point Achievements:
  - What did you do and How did you do it?
- Writing Your Cover Letter:
  - How to keep it brief
  - How to Mirror their language
  - Why this role interests you
- How to Directly Approach Companies

Interview - It's All About that Preparation

- Targeted Resume
- Research:
  - Where do I look to find out more about a company (Job Ad, Company Website, Job Board, Newspapers, Press Releases, Blogs, Business Publications, Google Searches, LinkedIn, YouTube, Twitter)
- Presentation:
  - How to show you have completed your research by asking intelligent questions
  - How to make sure you are not simply quoting statistics and actually having a conversation

- Personal Pitch:
  - How to show who you are in 90 seconds
  - Making sure to tailor your Personal Pitch
  - How to show your understanding of the specific role you are applying for
- Your Agenda for Getting this Job
- Why You?:
  - How to Answer Competency based Questions using the STAR Approach (Situation, Task, Action, Result)
- Day of the Interview
  - What to do on the day of the interview besides dressing formally, feeling fabulous and being early.

Networking - How to Think Like a Recruiter:

- Where are Jobs?
- Getting Your LinkedIn Profile Right
- How Big is Your Network?
- How do I Find Me?

Part 3: Job Hunting

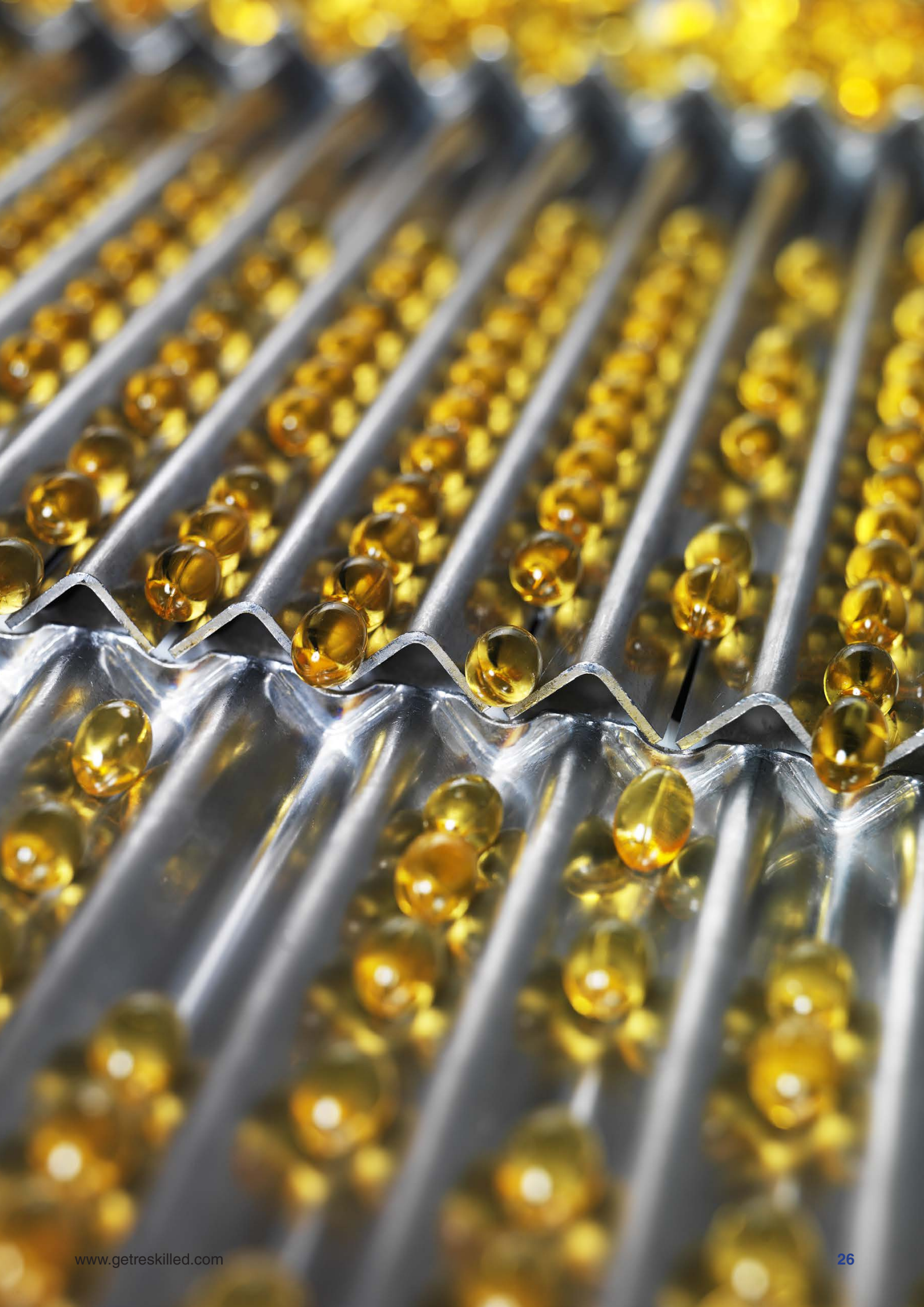
"By upskilling I have dramatically increase my confidence as well as my qualifications. At interviews I now feel I have more to offer a potential employer. As well as having the courses as a reference to engage interviewers and showcase my knowledge and qualifications I have also utilized the employment coaching webinars and applied the skills I learned from these webinar into my interviews. I have been very fortunate to have recently secured an operation technician role with a multinational biopharmaceutical company."

Edel Harkins - BioPharmaChem
(Graduated June 2013)

Chapter 6 - How long will it take?

Anyone that has ever spent time job hunting knows that it's not an overnight process - it usually takes longer than you're expecting. If you then add in reskilling and a change of industry, the process really can take time, so it's important to have realistic expectations going in.

Chances are that it will take several rounds of applying and getting feedback before you've really fine-tuned selling yourself for the new role you want. Of course, there are things you can do to prepare, to make sure you're not making avoidable mistakes, and to give yourself the best shot. In this next section, we look at how to go about job hunting, applying and interviewing.



Chapter 7 - How do I get started on my job search?

Here is our step by step guide to your pharmaceutical or medical device job hunt.

Information on roles

There are a wide variety of interesting roles that you can enter into, at both entry-level or higher, especially if you have skills that are transferable from other industries. There are excellent opportunities for promotion to roles with higher responsibility and increased pay as your skills and experience increase. Before looking for roles, you need to decide what is the most relevant, most interesting and most attainable for you. For a guide to work roles in the pharmaceutical manufacturing industry in Puerto Rico, see chapter 12.

Before you start searching for jobs

Once you've got a rough idea about the sort of roles you want to aim towards, here are some things to consider:

- **What skills do you already have?** Write down your responsibilities and skills learned in previous jobs. List *everything* and then start to think about how each could be transferable to the job roles you've looked at.

- **Complete a rough draft of your Resume.** With these skills in mind, complete a rough draft of your Resume. You're not sending it to anyone just yet but by drafting one; you'll start to see where your strengths and weaknesses are. (For more information on Resumes, see the next chapter)

- **What do you know about the industry?** It's all well and good having transferable skills, but you need to show potential employers that you're committed to a change of career and knowledgeable about their industry. Head on over to our blog section for more information about the pharmaceutical and medical device industries in Puerto Rico, it's a great place to start.

- **What about your network?** There's nothing better than first-hand knowledge - do you know someone in the industry that you can talk to? Think of friends, extended family, former colleagues – anyone you can have a discussion with at this stage is of benefit.

You've talked to everyone in your network, assessed you own skills and written a draft Resume – so where are the gaps? What are you missing? Acknowledge these gaps and begin to address them now.

Here at GetReskilled, our courses are designed to fill gaps in your knowledge so that you can become an eligible candidate for the job role you wish to pursue in this industry. Be sure to check out our Degree and Certificate programmes or you can see some of the courses we offer outlined in Chapter 5.

Where to look for vacancies

Once you're ready to start looking for vacancies, there are several online resources you can use for locating job openings. Ones that we recommend concentrating on are:

- Puerto Rico Job Bank
- Indeed
- Monster

You can also have a look at our jobs page here on GetReskilled for a list of vacancies across both the pharmaceutical and medical device industries.

Next steps

- Now is the time you want to get that draft Resume back out and get it fully updated – hopefully, you've addressed all those skills gaps and now you're ready to complete it and send it to employers.

- Start preparing for interviews – you don't know how quickly you might land your first interview, don't leave preparing until the last minute! Check out chapter 10 for information of how best to prepare.

- Start applying!

Chapter 8 - Mistakes to avoid when looking for a job?

There is an old saying in the recruitment industry, *"It's not the best person who gets the job, it's the best prepared person"*. At GetReskilled, we see a lot of extremely qualified, smart and capable people struggling to take the right steps and wasting precious time trying to make progress with their job search. To help you avoid some common mistakes, we've gathered together some great online resources.

Won't many of the mistakes be rather obvious?

For experienced job hunters, yes. However, we have found that they are far from obvious to someone who has been out of the job search process for a while. It is our sincere hope you find the content useful.

1. Starting your job hunt without doing your homework!

So you have been thinking of changing careers? The worst thing you can do is dive straight into applying for jobs. There is really quite a lot to do before you get to that stage; don't damage your chances before you even get started by rushing into applications.

GetReskilled Top Tips:

Check out this LinkedIn article on how to get started. It focuses on creating your LinkedIn profile, but many of the tips are equally applicable to Resume writing.

2. Not having a clear idea of which role you are applying for

Sending out lots of applications and not getting anywhere can be demoralising – whilst it might seem like a good idea to apply for any job you see, spending more time on applying for jobs most suited to you will be more fruitful in the long run. The pharmaceutical and medical device manufacturing companies have a wide variety of roles and positions. For people new to the industry, it can be a challenge to identify relevant job roles to suit your skills and figure out your future career pathway.

GetReskilled Top Tips:

Take a look at Chapter 12 for an outline of different jobs available dependent on your background as well as guidance on salaries and long-term career prospects.

3. Having a poorly constructed or badly written Resume.

First impressions really do last. Your Resume is your advert, your window display, your sales pitch – it has to sell you when you aren't there to sell yourself. A poorly written Resume undermines the skills and achievements you're trying to convey. Put yourself in the position of your potential employer, would you hire someone who couldn't be bothered to put together a decent Resume?

GetReskilled Top Tips:

Here is a link to an article on how to specifically craft your Resume for the Pharmaceutical Manufacturing and Medical Device Industry to help you make that all-important first impression.

We also recommend you search online for sample Resumes for your targeted role – this gives you an idea of the terminology, tone and wording that is most appropriate; try to incorporate that into your Resume. There are lots more Resume tips in our next chapter.

4. Leaving gaps in your work history on your Resume.

Lots of people out there have gaps in their work history, and they are often at a loss as to how to best present this to any future employer without casting a shadow over their application. One thing's for sure, you have to think about how you'll explain your gaps at interview – if they're obvious, then it's something most interviewers will ask about.

GetReskilled Top Tips:

Here is a link to an article *on how best to deal with those gaps in employment.*

5. Using one standard application.

Most hiring managers are extremely busy and will have only a few minutes to look over your Resume. You really do need to make an impression in the first few seconds, so the idea of a one size fits all Resume is just not going to cut it these days – a standard generic application is very obvious. Your Resume is your chance to sell yourself to this particular employer; the things of greatest importance will be different for every application.

GetReskilled Top Tips:

You need to tailor your Resume as precisely as possible to each and every role that you apply for. One of the biggest objections to this is the amount of time this can take – a little time-saving technique might be to draft up three Resume templates, each one with a different focus within your targeted area. When you come across a relevant position, use the most relevant Resume template as a starting point to tailor your application.

6. Submitting a Resume that only you have looked over

Apart from the very obvious typos that you may have missed, not having another pair of eyes critically assess your Resume is perhaps one of the most common mistakes we come across. The importance and value of having an outside pair of eyes go over your Resume really cannot be overstated! Having a friend or mentor do this is a great first step, but even better is to get honest feedback from a professional recruiter or industry specialist in your target industry, he or she will likely see things that you have completely overlooked.

GetReskilled Top Tips:

Identify at least three relevant people that you can show your Resume to – these need to be people who'll give you an honest appraisal and won't just be nice! It can be difficult to 'put yourself out there' like this, but it's better that someone like this spots your mistakes rather than a potential employer!

7. Sending a generic cover letter

Is the cover letter dead? We don't think so. Having a well-crafted cover letter that complements your Resume shows you have taken the time to research the company and aren't just applying for any job going with one standard application. There are still plenty of companies (particularly those where the person doing the hiring will have to work directly with you) that will take the time to thoroughly read them. It's important that you put the time and effort into putting a cover letter together that catches their attention and gets your Resume read.

GetReskilled Top Tips:

Have a look at this article *on crafting the perfect cover letter.*

8. Waiting for the perfect job to come to you

It's often said that many of the best jobs are never advertised. If there's a role you feel that you have the ideal skill set for or a company where you'd just love to work, rather than waiting for a job to be posted, why not take a more proactive approach to your job hunt taking advantage of that fact.

GetReskilled Top Tips:

Build yourself a list of 'target companies', do some thorough research and then proactively send in your Resume and cover letter or look to make connections. Check out this link to an article from LinkedIn on this.

9. Not making the most of your network

What network? You'd be surprised! If you can make your intentions about changing career known without harming your current employment then do so – speak to people. Ask for advice for a (completely made up) 'friend' if you have to. You might be surprised at the connections you currently have ... or the connections they have. Look to expand your network too; have a look at using LinkedIn to connect to people within your industry.

GetReskilled Top Tips:

Here is a link to an article on how to find the key decision makers at your target companies.

Start sussing out your current network and their current networks!

10. Thinking you've done all the research you can

Chances are, there is always something else you could be researching to give yourself a better shot at a career change. Whether it's job hunting skills, researching your chosen industry or practicing interview techniques, the internet has endless information for you. Focus on good content from credible resources to utilise your time best.

GetReskilled Top Tips:

Here are links to another couple of LinkedIn resource to help you on your way.

- Job Search Fundamentals Part 1
- Job Search Fundamentals Part 2

So now you're prepared – start job hunting! Remember to head to our Job Vacancies page where we pull together pharmaceutical and medical device jobs from all over Puerto Rico.

Chapter 9 - How should I structure my Resume?

1. **Keep it concise** - two pages is optimal unless you're told otherwise.

2. **Stick to a basic format** - personal details, academic background, work experience, professional/industry qualifications, other interests.

3. **Chronological order** - within each of these headings, lead the employer through your history. The idea is to show that you've gradually been gaining the skills and experience that is needed to be able to do this job. Don't leave any gaps in time (if you've got gaps, see chapter 8 for more tips on how to deal with them on a Resume).

4. **Be specific** - outline specific duties, responsibilities or experiences you've had if they relate to the job in question. You can't assume that an employer in a new industry knows what your old job involved, you've really got to spell out the similarities. Also be sure to use their language when tailoring your CV - if they ask for a certain skill in a job advert then make sure you use their phrase when discussing the skill, you may think a different phrase means exactly the same thing… they might not.

5. **Keep it relevant** - in terms of jobs, they should all be listed, but if there really are a limited number of transferable skills (are you sure you've considered everything?) then keep it brief and leave yourself the room to expand in other areas.

6. **Jargon & Abbreviations** - you've got to remember you're changing industries, don't use too much jargon or the message might get lost.

7. **Don't just list your jobs** - list responsibilities, measurable successes, targets you met and key achievements. If possible, keep note for interviews as to how this is transferrable to the new job and industry you're applying for.

8. **Keep it legible** - there's a temptation when you feel restricted by space to just make the font smaller and reduce the spacing of your document. Don't do it! You want your Resume to be easy to read, you don't want the employer put off before they've even read about you!

9. **Be clear -** take time to consider the key points and make sure they stand out once on paper, use formatting (such as **bold** and underlining) to make key points obvious on the page.

10. **Print it out -** when you think you're done, print a copy. There is a good chance this is how the employer will view it, so it's important that everything looks good on paper. Put it down, do something else and come back to re-read it with a clear head and fresh eyes. Still happy? Then you're probably ready to send it out!

If you're still having trouble getting started, we've included some sample Resumes in Part 5 to give you an idea of what's expected. But remember that there are no hard and fast rules, make your Resume work for you - it's your big chance to show someone why you're right for their job, so make the most of it.

"When I got interviews after that the companies were very interested in my course, I felt like I had gained an advantage again, and fortunately I am now employed by one of the biggest BioPharmaceutical companies in the World that is why I'd say continuing education can only be good for your career."
Denis Mehigan - BioPharmaChem

Chapter 10 - How should I prepare for an interview?

Interview preparation should fall into 3 categories:

Yourself

You have to know yourself inside out. This sounds like common sense, but it's often harder than it first seems. You have to be able to line yourself up against the job specification and critically analyse where your strengths and weaknesses are. Take time to think and practice clear and concise answers to address each.

You also have to make sure you can comfortably talk through your work history - when you're changing industry, it's important that you not only tell the interviewer what your roles have been before, but how they relate to the position you're applying for. You may think it's obvious, but there's the chance your interviewer knows very little about your previous role, so spell out the similarities. Don't leave them guessing.

Additionally, you should be able to give a confident overview of yourself in 5 minutes, many interviewers use this as a way of beginning an interview and letting you settle down - be aware of what your key points are.

The Company

Before you set off for an interview, you need to gather as much information as possible. You have to be able to show that even though you've not done this specific role in this industry before, you have a good idea of what it is and what it involves.

Have a look at the company's website, social media (Facebook, LinkedIn, etc.) and talk to anyone who knows something about the company. What you're after is a well-rounded view of the company, what they do and how they function. Not only does this help you look prepared and confident to the employer, it also helps you decide that this is a company you would enjoy working for.

Asking what you know about the company is often one of the opening questions in an interview - take the opportunity to do more than just relay a list of facts. Tell them why knowing this makes you want to work for them, what makes you a good fit or what can you add to the pursuit of their company goals. You can easily use this question to get an excellent start to your interview.

The Interview Process

Don't be afraid to ask about the process - you've got to know what you're preparing for.

- Are you only meeting one interviewer?
- What is their position within the company?
- Is there a set structure to the interview?
- Will there be any assessments or psychometric tests within this interview?
- How long is the interview scheduled to last?

Preparing effectively will give you confidence going into that all important interview. Even if you've asked all the above questions, expect the unexpected! Remember that no two interviews are ever the same and you can't guarantee any part of it. So be sure make the most of every opportunity given to you throughout the process and be clear on the key things you want someone to know about you.

Also ask about the rest of the process

- Are they making a selection based on these interviews alone?
- Is there a second stage of interviewing?
- Are there tests/assessments to do on a separate occasion?

These are all things you are perfectly entitled to ask and should be – having a clear idea of the process lets you confidently focus best on each task in turn with no surprises.

Chapter 11 - What are the mistakes to avoid during the interview?

So all your hard work has finally paid off and you have a number of job interviews lined up over the next few weeks. However, for some of you it may have been a long time since you last did a formal job interview. So what shouldn't you do? Let us take you through the most common job interview mistakes and our tips for avoiding them.

1. Being Unprepared for Interview Questions

There are many different ways that companies conduct interviews – there are lots of ways they can ask you about your past work experiences and your reasons for wanting their job. Some questions can be a little tricky if you're unprepared – by preempting these difficult questions you can prepare for how you might answer them. This way, your answers will sound more confident. There is a huge amount of material out there on how to best prepare for a job interview.

GetReskilled Top Tips:

Here is one particular link we like, but there are many others.

How to answer the 64 toughest interview questions

The key is to read about different types of questions as well as considering specific things you might get asked.

If at any point you are unsure about a question, don't be afraid to ask for some clarification. It's MUCH better to do that before you begin an answer.

One thing you'll almost certainly be asked is if you have any questions of your own; make sure you've thought of a few relevant, insightful questions to create a good impression and show your genuine interest in the role.

2. Dressing Inappropriately

When you interview for a job, it's imperative to look professional and polished. Although your everyday working attire may vary based on the position you're applying for, it's important to look well-dressed and put together for an interview, no matter what the company.

GetReskilled Top Tips:

In the pharmaceutical and medical device industries, always go with professional attire.

3. Arriving Late

Everyone knows that first impressions are very important; make sure you don't make a bad first impression before you even arrive. Running late not only suggests poor time management skills, but it shows a lack of respect for the company, the position and even your interviewer.

GetReskilled Top Tips:

Go the extra length to make sure that you aren't late – in fact, aim to be early. Plan your time so you make it to the interview location about 15 minutes before the scheduled start time. That way, if something unforeseen comes up on your way, you have some time in hand. It's always good to give yourself a little time waiting at the location to calm any nerves and focus your thoughts towards all that preparation you've been doing.

4. Being Distracted

Once you're in that interview room, the only thing you should be thinking about are the questions being asked and your answers. Distractions come in many forms – there are some you can control and some you can't. It is your responsibility to ensure you've dealt with all the ones you can control, both before you enter the room and throughout your time with the interviewer.

GetReskilled Top Tips:

Before you go in, deal with any outside distractions – switch off your mobile phone (or at the very least ensure it's silenced). Once in the room – keep your focus on the interviewer. It can be really easy to anticipate what you think they're going to ask or what you want them to ask and answer that. Really listen to the question, take a second if you need to consider your answer and give it, making sure you address all parts of the question.

If you're finding it difficult to stop your mind from racing and distracting you, try sitting forward in your chair and employ some good 'active listening' techniques.

If you find that your interviewer is the one who seems distracted or disorganised then it's even more important that you focus on making your 'key facts' heard and remembered.

5. Fuzzy Resume Facts

Even if you submitted a resume when you applied for the job, you may also be asked to fill out a job application. Stumbling to remember your own past doesn't make a great impression and may even lead people to wonder how honest you've been. Make sure you know the information you will need to complete an application, including dates of prior employment, graduation dates, and employer contact information.

GetReskilled Top Tips:

It's understandable that some of your older experiences may be hard to recall so review the facts before yougo into your interview. It can be helpful to keep a copy of your resume for yourself to refer to during your interview, just be careful not to use it as a crutch.

Of course, everything written on your resume should be the truth – the more honest you are on your resume, the better you will be able to discuss your past experience during your interview. Areas such as gaps in your career history can be especially tricky, make sure you've read Chapter 8 if you have any.

6. Talking Too Much

Of course, your interview is a time to talk ... appropriately. You may feel like you've got a lot to say and not much time to say it in, but talking too much really can harm your chances. Rambling can make you look disorganised. Keeping talking can make you look like you're not paying attention or not able to respond to social cues. Talking about your personal life can make you look unprofessional. Having said all that, saying too little can be just as damaging as saying too much – it's more about being personally aware than anything else. Here are our tips ...

GetReskilled Top Tips:

Listen to each question carefully and consider your answer – it's better to take a second before you answer than to start an answer and realize you've misinterpreted the question or not used your best example.

When giving long and detailed answers, be sure to keep looking to your interviewer for clues that they're looking to move on (e.g. Do they keep taking a breath to start to speak? Are they watching a clock?). Don't feel rushed, just be aware when they are trying to move things along.

Don't ever get sidetracked and start talking about your personal life. Your spouse, your home life or your children are not topics you should delve into, no matter how warm and welcoming your interviewer may be.

7. Badmouthing Past Employers

When you're asked hard questions, like "Tell me about a time that you didn't work well with a supervisor. What was the outcome and how would you have changed the outcome?" or "Have you worked with someone you didn't like? If so, how did you handle it?" never fall into the trap of bad mouthing other people. It's sometimes a smaller world than you think, and you just never know who your interviewer might know. You also don't want the interviewer to think that you might speak that way about his or her company if you leave on terms that aren't the best. And, most importantly, it's just not professional. Instead, review how to answer difficult questions.

GetReskilled Top Tips:

You want your interviewer to know that you can work well with other people and handle conflicts in a mature and effective way.

If you have to explain a situation, keep it factual. Keep the explanation as succinct as possible and focus more of your answer on explaining how you went about finding a solution. Keep it positive.

The best advice really is to only speak about people like they are in the room.

8. Sitting back and waiting ... indefinitely

Sometimes things really do just take time, especially in recruitment – there are many things that can hold the process up. But if you've had your interview and not heard anything back, you shouldn't just sit back and wait indefinitely. It can be difficult to know what's for the best, you've got to be careful that you don't ruin all your chances by being seen as annoying with continued, unsolicited contact.

GetReskilled Top Tips:

Do try to avoid this headache altogether by agreeing a plan for follow up whilst you're still in the interview – ask when you should expect to hear, suggest that you'll call on a certain day for an update if you've not heard.

If you're still left unsure, whether it's after your initial application or after an interview, have a look at this article for some great advice.

If you've still not managed to land yourself an interview for your dream job, have a look at our up to date vacancies page where you'll find jobs in the pharmaceutical and medical device industries from all across Puerto Rico.

Part 4:
Jobs & Opportunities

"The reasons I would recommend the course are:
1. The professionalism and passion of the lecturers comes across in the tutorials which gives the student confidence and encouragement to keep on top of the course.
2. The course content material is concise and interesting.
3. The timing of the release of the lessons is perfect; the student moves at a comfortable pace, one step at a time."
John Ryan - BioPharmaChem
(Graduated February 2014)

Chapter 12 - Jobs Roles and Salaries that fit your work experience and qualifications

Starting a job hunt in a new industry can be a daunting task - it's often difficult to know where your background and experience 'fits in'. To make the whole process a little less daunting, we've taken some example jobs from across the pharmaceutical and medical device industries and organized them by background and experience level, to give you an idea of where to be aiming for.

With a technical, scientific or manufacturing background, you're closer than you might think to being an ideal candidate for a role in the pharma or medical device industries.

Entry Level Roles	Technical Roles	More Advanced Roles
1. Manufacturing	1. Validation	1. Manufacturing
2. Science	2. Automation	2. Quality
3. Quality		3. Engineering
4. Engineering/Maintenance		
5. Logistics		

Entry Level Roles

Manufacturing Roles – Entry Level

Manufacturing Technical Specialist

Job description – Monitors production line for efficiency and productivity. Test products and assemblies for quality and functionality, involved in troubleshooting if issues found.

Average U.S. salary ($) - 63,140

Ideal background – Bachelor's degree in science or engineering field, experience within manufacturing (or scientific) environment advantageous.

Career path – Group Leader > Technology Manager > Technology Director

Manufacturing Operations Associate

Job description – Works in daily operation of the manufacturing process, conducts duties in line with company, as well as external, protocols and procedures. Will be involved in set-up of smaller equipment as well as troubleshooting issues if they arise.

Average U.S. salary ($) - 35,000

Ideal background – Bachelor's degree in science or engineering field, experience within manufacturing (or scientific) environment advantageous.

Career path – Supervisor > Manufacturing Manager > Manufacturing Director

Technician (Manufacturing/Production)

Job description – The Technician performs chemical operations, testing, inspection, and cleaning duties on a variety of equipment used in the manufacturing plant. In addition, this role will be involved in carrying out subdivision, solid charge, distillation, filtration and pack-off activities, in accordance with safety and cGMP requirements. Maintaining proper cGMP compliant documentation and good housekeeping are also integral to this role. Can be involved with quality control procedures.

Average U.S. salary ($) - 55,660

Ideal background – Operations experience within a related field advantageous.

Career path – Senior Technician > Supervisor > Production Executive

Assembler

Job description – Assembling finished product into packaging in line with site specifications and policies.

Average U.S. salary ($) - 31,720

Ideal background – Previous experience in a manufacturing environment is advantageous.

Career path – Senior Assembler > Production Supervisor > Production Manager

Chemical Process Technician

Job description – Performs chemical process testing to ensure chemical balance maintained for operations, mixings solutions and materials in line with company standards. Operation and maintenance of chemical mixing equipment.

Average U.S. salary ($) - 55,000

Ideal background – High school level education, previous experience within chemical processing setting highly desirable.

Career path – Senior Chemical Process Technician

Food Processing Technician

Job description – Involved in quality control and research, they make sure that output is produced in line with internal and external standards and procedures. Detailed record keeping is an important part of the job.

Average U.S. salary ($) - 37,330

Ideal background – Degree in a scientific field. Experience in a related role is highly beneficial.

Career path – Senior Food Processing Technician > Production Supervisor > Production Manager

Packing Machine Operator

Job description – Operating an automated packing machine. Ensures product is correctly packaged, in line with site specification and procedures and ensures efficient ongoing line production.

Average U.S. salary ($) - 28,940

Ideal background – Previous machine operator experience highly desirable.

Career path – Senior Operator > Production Supervisor > Production Manager

Science Roles – Entry Level

Chemist

Job description – Will plan, organize and execute experimental work relevant to improvement of manufacturing processes as well as testing of materials at many stages (i.e. raw materials, intermediaries etc.). Have direct input in scaling-up processes from laboratory to plant-size manufacture.

Average U.S. salary ($) - 79,140

Ideal background – Honours degree in chemistry, laboratory work experience, good awareness of working protocols and procedures within the industry.

Career path – Senior Chemist > Laboratory Manager > Quality Director

Laboratory Analyst

Job description – Duties include sampling, testing and analyzing of materials from all stages of manufacture process within a laboratory environment. They may also have data input and laboratory equipment calibration and maintenance responsibilities.

Average U.S. salary ($):

- 0-5 years: 35,000
- 5+ years: 41,000

Ideal background – Qualification in chemical process technology/bio-process technology or similar, previous experience in chemical/microbiological techniques, good working knowledge of relevant protocols and regulations.

Career path – Senior Laboratory Analyst > Supervisor > Assistant Chemist

Laboratory Technician

Job description – Provide all technical support for functioning of the lab to ensure that a quality product is produced within a controlled environment. Assist in handling and maintaining lab equipment, collecting and analyzing data, and performing routine laboratory work. This role is engaged in different testing methodologies, ranging from microbiology and molecular biology to the latest analytical chemistry techniques. Adherence to protocols and procedures is extremely important, responsible for documentation and logbooks. Often carrying out routine tasks but must be to a very high standard.

Average U.S. salary ($) - 47,390

Ideal background – High school level education in science subjects, HND/degree may be of benefit. Prior lab experience extremely beneficial.

Career path – Senior Laboratory Technician > Team Leader Technician > Laboratory Manager

Quality Roles – Entry Level

Quality Assurance (QA) Specialist

Job description – This role can have a broad job specification. QA specialists can be engaged in different testing methodologies as well as environmental and raw material sampling in accordance with cGMP (Current Good Manufacturing Practices). They can also be involved in updating SOPs, reviewing GMP documentation and auditing. The role further requires monitoring of process outputs, reporting on performance and giving advice.

Average U.S. salary ($) -

- 0-5 years: 44,000
- 5-10 years: 54,000

Ideal background – Bachelor's degree (ideally in manufacturing or engineering), entry with HND possible with relevant experience.

Career path – Senior QA Specialist > QA Manager > QA Director

Quality Control (QC) Specialist

Job description – Carry out lab testing of products prior to lot release, also tasked with calibration and maintenance of lab equipment.

Average U.S. salary ($) -

- 0-5 years: 40,000
- 5-10 years: 46,000

Ideal background – Bachelor's degree in scientific discipline (ideally biology, biotechnology or microbiology), working knowledge of relevant protocols and regulations.

Career path – Senior QC Specialist > Quality Control (QC) Manager > QC Director

Project Quality Engineer

Job description – Develops systems and system documentation to ensure manufacturing meets all internal and external quality requirements. This involves reviewing of contractual documentation to highlight quality requirements. In addition, reviews systems and documentation regularly to analyze effectiveness and review or rewrite where necessary.

Average U.S. salary ($) - 86,025

Ideal background – Bachelor's degree in engineering, previous experience as a Quality Engineer is highly desirable.

Career path – Senior Project Quality Engineer

Quality Engineer

Job description – Provides quality assurance support, ensuring that the operations continue in accordance with quality requirements while maintaining efficiency.

Average U.S. salary ($) - 86,025

Ideal background – Degree in engineering and good knowledge of quality systems - previous experience in quality engineering advantageous.

Career path – Senior Quality Engineer

Associate Quality Engineer

Provision of Quality Assurance support to manufacturing process to ensure that all quality requirements are met whilst production is efficient, supplies suggestions of strategy improvement. Also involved in extensive testing of final product to ensure standards prior to distribution. Likely to work in supervision of several teams.

Average U.S. salary ($) - 60,000

Ideal background – Bachelor's degree in engineering or lower level engineering qualification with work experience in technician role.

Career path – Quality Engineer

Engineering/Maintenance Roles – Entry Level

Process Engineer

Process Engineers develop, manage, and improve manufacturing processes that produce Active Pharmaceutical ingredients. The Process Engineer starts with a chemical synthesis and utilizing their understanding of Chemical Processing Unit Operations will develop a manufacturing process that ensures that high-quality products are produced in a safe and efficient manner. The manufacturing process will then be automated by the process engineer and finally run in the production facility.

Average U.S. salary ($) - 96,350

Ideal background – Bachelor's degree in scientific field or chemical engineering, previous experience within a manufacturing environment is advantageous.

Career path – Senior Engineer > Engineering Manager > Engineering Director

Engineer (Projects)

Job description – Project engineer reviews and consults on project plans before taking on the day-to-day running of a project to install equipment for new processes and upgrades in a large scale manufacturing plant. Tasks will include budget and scheduling as well as safety and legal considerations. Once the process is operational, responsibilities shift to assessment and further optimization.

Average U.S. salary ($) - 93,650

Ideal background – Bachelor's degree in scientific field or chemical engineering, previous experience within a manufacturing environment is advantageous.

Career path – Senior Engineer > Engineering Manager > Engineering Director

Engineer (Production/Chemical)

Job description – Have input at all stages of the industrial production process (design, developing, installing and operating). They may be involved in researching new products and technologies as well as maximising efficiency and productivity of working plants.

Average U.S. salary ($) - 103,590

Ideal background – Bachelor's degree in engineering, relevant work experience advantageous.

Career path – Senior Engineer > Manufacturing Lead/Manager > Production Director

Associate Engineer

Job description – Usually involved in supervision of multiple teams. Work in oversight of engineering processes, analyzing effectiveness and suggesting improvements.

Average U.S. salary ($) - 86,179

Ideal background – Bachelor's degree in Engineering and experience in appropriate engineering role.

Career path – Engineer

Electrician

Job description – Full support of the electrical systems within the manufacturing process including installation, maintenance and repair.

Average U.S. salary ($) - 54,520

Ideal background – Successful completion of apprenticeship and fully licensed. Experience in a manufacturing setting highly desirable.

Career path – Senior Electrician > Facilities Supervisor > Facilities Manager

Electronic Technician

Job description – Calibration, maintenance and repair of electronic instruments used within the manufacture process.

Average U.S. salary ($) - 60,330

Ideal background – Fully licensed. Experience within a manufacture setting highly desirable.

Career path – Senior Technician > Supervisor

HVAC Supervisor

Job description – Planning, organizing and directing of employees involved with all aspects of the heating and air conditioning systems. This includes installation, maintenance and repair and may involve supervision of contract staff. Responsible for inspection of work to ensure it meets all internal and external safety and quality requirements.

Average U.S. salary ($) - 64,670

Ideal background – Bachelor's degree in Facilities Management or similar. Previous role as HVAC Technician highly desirable and previous supervisory experience advantageous.

Career path – HVAC Manager > Facilities Manager

HVAC Technician

Job description – Involved with all aspects of installation, maintenance and repair of air conditioning and heating systems, ensuring all work meets necessary requirements

Average U.S. salary ($) - 45,220

Ideal background – High school level qualification and HVAC experience highly desirable.

Career path – HVAC Mechanic > HVAC Supervisor > HVAC Manager

Industrial Engineer

Job description – Designs, develops and installs components to produce high-quality output in line with regulations and in a cost-effective manner. May be involved with supervision of Technicians.

Average U.S. salary ($) - 85,110

Ideal background – Bachelor's degree in mechanical, industrial or electrical engineering. Previous experience as an engineer in an industrial setting is advantageous.

Career path – Senior Industrial Engineer > Production Manager > Operations Manager

Instrumentation Engineer

Job description – Provision of computer programming and instrumentation support as well as designing and developing specialized instrumentation and equipment as required.

Average U.S. salary ($) - 95,780

Ideal background – Bachelor's degree in Electrical Engineering. Experience with instrumentation in a manufacturing setting advantageous.

Career path – Senior Instrumentation Engineer

Maintenance Supervisor

Job description – Coordination of safety, maintenance and equipment needs across the entire manufacturing site. Involved in development of staff training procedures in these areas also.

Average U.S. salary ($) - 63,750

Ideal background – Bachelor's degree in a related field or a Bachelor's degree supplemented with relevant maintenance experience. Supervisory experience advantageous.

Career path – Maintenance Manager > Facilities Manager

Maintenance Technician

Job description – Assists in maintenance procedures, testing and adjustment. May be tasked with a specific set of machines for which responsibility is given for set up, adjustment and maintenance as required. Must keep accurate records of testing and quality assessments. Assesses delays in the production process as well as any change in standards of output, correcting accordingly.

Average U.S. salary ($) - 49,220

Ideal background – Maintenance operations experience advantageous.

Career path – Senior Technician > Supervisor > Production Executive

Logistics Roles

Procurement Executive

Job description – Duties include purchasing equipment, material, goods and services as required for the manufacturing process. They are tasked with ensuring quality alongside cost effectiveness. This may involve monitoring of sales and stock as well as performance against competitors.

Average U.S. salary ($) - 51,000

Ideal background – Bachelor's degree in business or related.

Career path – Senior Procurement Executive > Procurement Manager > Procurement Director

Logistics Specialist

Job description – Tasked with logistical coordination across the whole life cycle of a product from ensuring supply of raw materials to distribution of final product in line with customer demand (including minimizing storage and transportation costs).

Average U.S. salary ($) - 76,830

Ideal background – Bachelor's degree in logistics, supply chain management or industrial engineering. Previous experience as logistics coordinator.

Career path – Senior Logistics Executive > Logistics Manager > Logistics Director

Technical Roles

Validation

Quality Coordinator

Job description – Develops, implements and evaluates the quality program - looks to improve efficiency whilst maintaining standards. Will investigate incident reports and make recommendations for improvements.

Average U.S. salary ($) - 53,260

Ideal background – Experience with quality procedures in a manufacturing setting is highly desirable.

Career path – Quality Assurance Specialist > Quality Manager

Validation Engineer

Job description – Designing process or equipment protocols to ensure output, internal and external safety and quality requirements.

Average U.S. salary ($) - 90,010

Ideal background – Bachelor's degree in engineering or scientific discipline.

Career path – Senior Validation Engineer

Quality Engineer

Job description – Provides quality assurance support, ensuring that the operations continue in accordance with quality requirements while maintaining efficiency.

Average U.S. salary ($) - 86,025

Ideal background – Degree in engineering and good knowledge of quality systems - previous experience in quality engineering advantageous.

Career path – Senior Quality Engineer

Document Management Specialist

Job description – Plan and implement systems to span the manufacturing process that allow successful storage, retrieval and sharing of electronic records and documents across the site. Also involved in constructing documents and literature to be released.

Average U.S. salary ($) - 55,659

Ideal background – Bachelor's degree in a computer related field, experience within manufacturing setting advantageous.

Career path – Document Management Supervisor

Automation Roles

Engineer (Automation)

Job description – An Automation Engineer primarily supports manufacturing, utilities and facilities operations, as well as the operation and maintenance of the entire plant's automation and control systems. Responsible for the support and execution of automation qualification as well as the resolution of all automation-related issues; the Automation Engineer will also develop Standard Operating Procedures (SOPs) and implement maintenance programmes for the automation and control systems. In addition, managing vendor service contracts as well as preparing the operation and maintenance budget will come under the purview of this role.

Average U.S. salary based on years of experience($) -

- 0-3 years: 65,000 average
- 3-5 years: 80,000 average
- 5+ years: 92,000 average

Ideal background – Bachelor's degree in engineering, knowledge of automated systems, previous experience of control/instrumentation in relevant industry.

Career path – Senior Engineer > Engineering Manager > Engineering Director

Employment outlook – Automation Engineer named 2nd 'most in-demand position' in engineering in 2015, expected to remain in high demand.

Systems Engineer

Job description – Tasks include creation, fitting and monitoring equipment and assembly lines within the manufacturing process. Aiming to integrate the entire process, the role covers both hardware and software components.

Average U.S. salary ($) - 110,650

Ideal background – Bachelor's degree in engineering, mathematics or similar, experience in an industrial environment advantageous.

Career path – Senior Systems Engineer > IT Manager > IT Director

Applications Engineer

Job description – Design, implement and maintain applications and software used within the manufacturing process. Involved with ongoing testing and analysis.

Average U.S. salary ($) - 87,000

Ideal background – Bachelor's degree in engineering, computing or information technology. Relevant experience in manufacturing environment highly desirable.

Career path – Senior Applications Engineer

Computer Operations Specialist

Job description – Oversees coordination of computer processing systems and procedures. Plans, tests and analyzes updates to systems. Focus is on producing efficient systems while maintaining user satisfaction.

Average U.S. salary ($) - 87,320

Ideal background – Previous experience in computer systems within manufacturing operations highly desirable.

Career path – Senior Computer Operations Specialist

More Advanced Roles

Manufacturing Roles

Operations Supervisor

Job description – Responsible for management of an operation shift. Directly responsible for shift personnel, equipment and for anticipating and/or resolving delays.

Average U.S. salary ($) - 56,000

Ideal background – Background in mechanical technology, degree preferred and along with significant manufacturing experience.

Career path – Operations Manager > General Manager

Production Executive

Job description – Involved in planning, coordinating and controlling the manufacturing process. Their team is tasked with ensuring cost effectiveness as well as oversight of all human and material resources.

Average U.S. salary ($) - 65,000

Ideal background – Bachelor's degree in science or engineering, previous experience in a manufacturing environment advantageous.

Career path – Senior Production Executive > Manufacturing Lead > Production Director

Pharmacologist

Job description – Work depends upon the employer's focus, some will be involved in screening new compounds, others will be involved in testing later in the drug development process. Finally, some pharmacologists run ongoing clinical trials and lab experiments to ensure effective products.

Average U.S. salary ($) - 104,000

Ideal background – Bachelor's degree in relevant discipline such as pharmacology, pharmacy, toxicology, etc. Previous lab work and/or a higher level degree are advantageous.

Career path – Senior Pharmacologist > Lab Manager

Quality Roles - Advanced

Regulatory Affairs Specialist

Job description – Input into product development and manufacturing to ensure that products (including labelling and packaging) meet international requirements.

Average U.S. salary ($) - 76,843

Ideal background – Bachelor's degree in biological sciences or related, experience within a regulatory environment.

Career path – Senior Regulatory Affairs Specialist > Regulatory Affairs Manager

Quality Coordinator

Job description – Develops, implements and evaluates the quality program - looks to improve efficiency whilst maintaining standards. Will investigate incident reports and make recommendations for improvements.

Average U.S. salary ($) - 53,260

Ideal background – Experience with quality procedures in a manufacturing setting is highly desirable.

Career path – Quality Assurance Specialist > Quality Manager

Senior Quality Control Engineer

Job description – Provides leadership to Quality Assurance support. Ensuring that all manufacturing operations and products meet internal and external quality requirements.

Average U.S. salary ($) - 96,073

Ideal background – Bachelor's degree in engineering and significant experience as a quality engineer.

Career path – Quality Director

Engineering Roles - Advanced

Senior Industrial Engineer

Job description – Design, develop and install components for engineering projects to result in efficient and effective manufacturing processes. Supervision of technicians may be required.

Average U.S. salary ($) - 99,520

Ideal background – Bachelor's degree in engineering and significant relevant experience within a manufacturing environment.

Career path – Industrial Engineering Director

References

- Bureau of Labor Statistics
  http://www.bls.gov/oes/current/oes_nat.htm#15-0000
- http://salary.careerbuilder.com

Part 5: Resources

The Industries Explained

Pharmaceuticals

Pharmaceutical products are based upon active ingredients derived from chemical synthesis. In general, there are two main stages in pharmaceutical manufacturing: primary and secondary manufacturing. The former involves processing raw materials into active parts of the medicines, while the latter involves mixing these active ingredients with pharmaceutical excipients to form the actual medicines, as well as product packaging.

Bio-Pharmaceuticals / Biologics

Biopharmaceuticals are any medicinal product manufactured in, extracted from, or semisynthesized from biological sources. These differ from the conventional chemically synthesised medicines in their more complex molecular structures and are expected to be more compatible with the human body, giving rise to fewer side effects. Manufacturing in this area is also extremely precise as these natural products can be heat sensitive and prone to contamination. Some of the most important discoveries using this technology were the creation of vaccines, proteins for the treatment of diabetes, as well as antibodies for anti-cancer treatment. Biologics are a high-growth area for the medtech sector and are expected to contribute to significant revenue in the years to come.

Medical Devices

‘Medical device’ is a wide encompassing term for any product, instrument or item which is used to diagnose, prevent, treat or cure health conditions without any chemical or pharmacological action on or within the body. Devices can be designed for external use (such as glucose meters for patients with diabetes) or internal use (such as implants used within surgery). Due to the variety of products within this industry, specific manufacturing processes vary, but what always remains unchanged is the strict adherence to protocols to ensure the safety and reliability of the product.

Nutritionals

Nutritionals is a segment that involves the research, development and manufacturing of products such as milk powder for babies (i.e. infant formulas), young children, as well as infants with special nutritional needs. This segment plays an important role as it contributes to better quality of life through constant scientific innovation. Nutritional products are produced using the same high-quality manufacturing standards observed throughout the entire pharmaceutical industry.

Major Pharmaceutical and Medical Device Companies in Puerto Rico

Abbott

Area/Products: Diagnostics, medical devices, generic pharmaceuticals and nutritionals.

Brief history: Abbott worldwide was founded in 1888. Globally, Abbott employs almost 70,000 people, with a customer base across almost 130 countries. 2014 global sales were $22 billion. Abbott work in research, development, manufacture and marketing of a range of products. Their portfolio spans the breadth of healthcare including medical devices, diagnostics, branded generic pharmaceuticals and nutritionals.

Presence in Puerto Rico: Abbott employs approximately 1500 across Puerto Rico after establishing a presence on the island in 1968. The company has several plants here manufacturing pharmaceutical and biotechnological products.

Website: www.abbott.com

AbbVie

Area/Products: Biopharmaceuticals

Brief history: Originally a part of Abbott, AbbVie was established as a distinct company in early 2013. They describe themselves as having “the expertise and structure of a proven pharmaceutical leader, and the focus and passion of an entrepreneur and innovator”. Their work focusses on developing and manufacturing pharmaceuticals in fully integrated therapeutic areas including oncology, antiviral and renal/cardiovascular. Approximately 26000 people work for AbbVie worldwide and their products reach over 170 countries.

Presence in Puerto Rico: AbbVie has three manufacturing plants across Puerto Rico, involved in the production of 13 different products. Activities include production of APIs biologics and drug products. They employ over 1000 people in total across the island.

Website: www.abbvie.com

Actavis

Area/Products: Generic and branded pharmaceuticals

Brief history: Actavis worldwide, with global headquarters in Dublin, works in the fields of both branded and generic pharmaceuticals, over the counter medications and biologics. Actavis worldwide is the largest generic pharmaceutical supplier globally. In July 2014, Actavis bought Forest Laboratories and most recently, in 2015, Actavis bought Allergan, the manufacturer of Botox

Presence in Puerto Rico: Actavis began activities on Puerto Rico in 2013 after buying Warner Chilcott, who had an established manufacturing presence here. Since then, Actavis have announced significant investment in developing their manufacturing footprint, and headcount, in Puerto Rico.

Website: www.actavis.com

Amgen

Area/Products: Biotechnology

Brief history: Established in 1980, Amgen was one of the first companies to bring biotechnology based products to patients. They led the way in developing innovative products based on advances in recombinant DNA and molecular biology, and they were responsible for biotechnology's first blockbuster medicines. Their portfolio today includes treatments in the therapy areas of oncology, rheumatoid arthritis and other autoimmune diseases.

Presence in Puerto Rico: Amgen's Puerto Rico manufacturing site includes six different plants and carries out processes such as protein manufacture and finished drug product production. They directly employ over 1000 people in Puerto Rico.

Website: www.amgen.com

Baxter

Area/Products: Medical devices, pharmaceuticals and biotechnology

Brief history: Baxter began in the 1930s by launching the first commercially prepared intravenous (IV) solutions; today, Baxter operates as a global diversified healthcare company. Its products serve disease areas such as haemophilia, infectious diseases, kidney disease, immune disorders and trauma treatment. In 2014, Baxter International Inc. reported sales of $16.7 billion and employed approximately 65,500 people worldwide.

Presence in Puerto Rico: Baxter has had a presence in Puerto Rico since 1958, initially as Travenol. Today, Baxter employs approximately 4000 people across three manufacturing sites in Puerto Rico - Jayuya, Aibonito and Guayama.

Website: www.baxter.com.pr

BD (Becton, Dickinson and Company)

Area/Products: Medical Technology

Brief history: Started in 1897, BD now employs almost 30,000 people in over 50 countries. Their focus is on medical technology to improve drug delivery, diagnostic abilities and advancing drug discovery. They have a range of products including medical devices, laboratory instruments, reagents, medical supplies and diagnostic products. The company operates over three distinct segments - BD Medical, BD Diagnostics and BD Biosciences.

Presence in Puerto Rico: BD began operations in Puerto Rico with a thermometer production site in 1957. Today, they employ approximately 600 staff across sites in Cayey and Juncos.

Website: http://www.bdbiosciences.com/us/home

Boston Scientific

Area/Products: Medical devices

Brief history: Boston Scientific produces a large range of medical devices used to diagnose and treat patients with issues in the areas of cardiology, urology, endoscopy and many more. It was founded in 1979 with the aim of creating less invasive medical devices and procedures, they continue to innovate across expanding areas of medicine. They estimate that around 21 million people were treated with one of their products in 2014. Boston Scientific currently employs approximately 23,000 people across 40 countries.

Presence in Puerto Rico: Boston Scientific currently employ approximately 700 people at a manufacturing site in Dorado. This site produces medical devices for use in cardiology.

Website: www.bostonscientific.com

Bristol-Myers Squibb (BMS)

Area/Products: Biopharmaceuticals

Brief history: BMS was founded in the US in 1858 and since then they've grown via pipeline development and acquisition. In 2014, they reported sales of $15.9 billion and employed around 28,000 people globally. BMS currently operate under a BioPharma strategy - combining the scope of a global pharmaceutical company with the 'entrepreneurial spirit and agility' of a biotech company. Over the last seven years, they have brought 12 new medicines to market with a current product range in disease areas including hepatitis, cardiovascular disease, cancer and HIV/AIDS.

Presence in Puerto Rico: BMS's Humacao manufacturing plant opened in 1970. Today, it produces products for cardiovascular, central nervous system and dermatological related conditions, amongst others. Their second site, in Manati, employs around 450 people in various manufacturing processes, including aseptic processing, inspection and packaging and oral solid dosage.

Website: www.bms.com

C-Axis

Area/Products: Medical Contract Manufacturing

Brief history: C-Axis began in Minnesota in 1997 and provides medical contract manufacturing to the medical device industry. More specifically, they produce parts for implantable medical devices and surgical instruments.

Presence in Puerto Rico: The manufacturing site in Caguas is one of only two sites operated by C-Axis. It opened in 2004 as a direct result of needs expressed by clients. In 2012, C-Axis moved into larger premises in the same area to accommodate their increasing activities.

Website: www.c-axis.com

CooperVision

Area/Products: Contact lens manufacture

Brief history: CooperVision is a leading manufacturer of soft contact lenses and related products. The CooperVision brand began in 1980 but the parent company has been in existence since 1958. In 2005, they became the third biggest soft contact lens company in the world. Their range is distributed to over 100 countries.

Presence in Puerto Rico: The Juana Diaz based site provides sales, distribution and manufacturing services.

Website: www.coopervision.com

CR Bard

Area/Products: Medical Devices

Brief history: CR Bard began as a one-man shop in 1907 and one of the earliest products was the first balloon catheter. Today they have grown to be a successful medical device manufacturer with four divisions - vascular, urology, oncology and surgical specialities. They currently employ over 13000 people worldwide.

Presence in Puerto Rico: The Humacao plant provides manufacturing and distribution operations and employs approximately 700 staff.

Website: www.crbard.com

Edwards Life Sciences

Area/Products: Medical Devices

Brief history: The company began in 1958 when its founder turned his fascination with the heart into an attempt at building one. This led to the creation of the first artificial mitral valve. Edwards Lifesciences continue to have a specialist focus on cardiology - heart valves and hemodynamic monitoring particularly. They have approximately 8500 employees worldwide, with a presence in over 100 countries.

Presence in Puerto Rico: As well as a sales base in San Juan, Edwards Life Sciences has a manufacturing plant in Anasco that employs over 1200 people.

Website: www.edwards.com

Eli Lilly

Area/Products: Pharmaceuticals

Brief history: Lilly was first founded in 1896 as a medical wholesaler before expanding into research, development and manufacture. Today they have products

treating a wide range of conditions including diabetes, mental health conditions and cancer. Lilly are now one of the world's biggest pharmaceutical companies. They have approximately 41000 staff worldwide and their products are supplied to 120 countries.

Presence in Puerto Rico: The company has an active ingredient and oral solid dose manufacturing site in Carolina, which employs approximately 1600 people.

Website: www.lilly.com

Haemonetics

Area/Products: Medical Devices

Brief history: The company was established in 1971 with a range of devices and consumables for blood collection and processing. Today, Haemonetics present themselves as a Blood Management Solution company. They have a global staff of approximately 1800 and products are sold in 50 countries.

Presence in Puerto Rico: Haemonetics has its Puerto Rico base in Fajardo.

Website: www.haemonetics.com

Heraeus Medical Components

Area/Products: Medical Device Components

Brief history: As part of the Heraeus Group, established in 1856, Heraeus Medical Components specialize in using metals to produce high-quality medical device components. Products include medical coils, ground wires and electrodes.

Presence in Puerto Rico: Heraeus Medical Components have a production site in Dorado, Puerto Rico. This is one of seven within the company.

Website: www.heraeus-medicalcomponents.com

Hill-Rom - Aspen Surgical

Area/Products: Medical Technology

Brief history: First established in 1929 with the idea to “bring the home into the hospital”, HIll-Rom manufacture a range of medical technologies including mobility and handling solutions alongside patient support systems. In Puerto Rico, Hill-Rom operate as Aspen Surgical Puerto Rico and have a specialist focus on disposable surgical instruments such as blades, scalpels and wound care.

Presence in Puerto Rico: Aspen Surgical Puerto Rico has a manufacturing site in Las Piedras, which employs approximately 230 people.

Website: www.aspensurgical.com

Integra LifeSciences

Area/Products: Surgical Devices

Brief history: Established in 1989, Integra LifeSciences develop and manufacture surgical devices and associated items. Their products are used in a wide range of surgical disciplines including neurosurgery, reconstructive surgery and dentistry.

Presence in Puerto Rico: Integra LifeScience has a manufacturing site in Anasco, Puerto Rico.

Website: www.integralife.com

Johnson & Johnson (Ethicon, Janssen, McNeil)

Area/Products: Healthcare Products

Brief history: Founded in 1886 with the initial idea that wounds should be treated and dressed using sterile equipment - today’s Johnson and Johnson is one of the world’s biggest healthcare companies. Johnson and Johnson operate three distinct divisions

- medical devices, pharmaceuticals and consumer health. Johnson and Johnson products are marketed in 57 countries via almost 250 operating companies - global personnel is approximately 120,000.

P**resence in Puerto Rico:** Johnson and Johnson subsidiaries Ethicon, Janssen and McNeil all have manufacturing plants on the island.

Website: www.jnj.com

Medtronic (Covidien)

Area/Products: Medical devices

Brief history: Medtronic began as a medical supply repair shop in the US in 1949, their first commercial product was a battery powered, wearable pacemaker. From then on they have focussed on technology as a means of improving treatment. Today there is a focus on using that technology to improve treatment and management of chronic conditions specifically - Medtronic claim that “every three seconds, another life is improved by a Medtronic product or therapy”. In 2014, Medtronic bought Irish company Covidien to further expand their scope. Globally, Medtronic employ over 85,000 people in over 160 countries.

Presence in Puerto Rico: Medtronic operate three manufacturing facilities across Puerto Rico, with over 3000 employees. The company’s footprint on the island was further increased after the purchase of Covidien who operate a manufacturing plant in Ponce that employs approximately 2200 staff.

Website: www.medtronic.com

Merck

Area/Products: Life Sciences

Brief history: In 1668, Jacob Friedrich Merck bought the Angel Pharmacy in Darmstadt, Germany - this began the family's involvement with healthcare. In 1891, Merck and Co was established. Through diversification, mergers and acquisitions, the company grew significantly. Most recently, in 2009, Merck and Schering-Plough merged to form the second-largest healthcare company in the world.

Presence in Puerto Rico: The company has been operating in Puerto Rico for over 60 years and today, they have over 1000 staff in facilities across the island.

Website: www.merckpr.com

Mylan (McDermott Lab)

Area/Products: Pharmaceuticals

Brief history: Beginning in 1961 as a pharmaceutical distributor in the US, it was 1966 before Mylan manufactured their first product - penicillin. From there, Mylan has grown to be one of the biggest generic and speciality pharmaceutical companies in the world. They have a staff of over 30,000 worldwide, and their products are distributed to over 140 countries.

Presence in Puerto Rico: Mylan have a manufacturing site in Caguas that employs approximately 400 people.

Website: www.mylan.com

Neolpharma

Area/Products: Pharmaceuticals

Brief history: The Neolpharma Group is an integration of companies skilled in development, manufacture and distribution of pharmaceutical products.

Presence in Puerto Rico: Neolpharma Puerto Rico is one of three sites of production for the Neolpharma Group. Manufacturing here was established over 40 years ago and now has significant experience and technology for the production of solid and liquid forms, pearls and capsules. They employ around 200 people.

Website: www.neolpharma.com

Pall

Area/Products: Laboratory Services

Brief history: Founded in 1946, parent company Pall, is a filtration, separation and purification company based in the US. The company has two divisions - Life Science and Industrial.

Presence in Puerto Rico: Pall Life Sciences Puerto Rico is the Fajardo-based manufacturing plant that focusses on servicing life science clients.

Website: www.pall.com

Patheon

Area/Products: Pharmaceutical and Biopharmaceutical Manufacturing

Brief history: Established as a contract pharmaceutical manufacturer in 1974, today Patheon offer end-to-end supply chain solutions for pharmaceutical and biopharmaceutical companies. Dealing with development and manufacturing for a wide range of product types, Patheon employ over 8000 people and serve over 400 client companies worldwide.

Presence in Puerto Rico: Patheon have a manufacturing facility in Manati, Puerto Rico, employing approximately 500 people.

Website: www.patheon.com

Pfizer

Area/Products: Pharmaceuticals

Brief history: Pfizer was first established in 1849 as a fine-chemicals business in New York and has grown to become the world's biggest bio-pharmaceutical company through both pipeline development and acquisition. Pfizer has treatments in many prominent disease areas and therapies in most high-growth markets. In 2014, Pfizer's revenue was reported as $49.6 billion.

Presence in Puerto Rico: Pfizer currently employs over 2500 people across three manufacturing sites in Puerto Rico.

Website: www.pfizer.com

ProMed Caribe

Area/Products: Component molding

Brief history: Established in 1989, ProMed are a specialist company that molds medical and implantable silicone, combination components, and bio-material grade plastics.

Presence in Puerto Rico: Based in Dorado, ProMed Caribe specializes in silicone component molding, sub-assembly and assembly.

Website: www.promedmolding.com

Roche Diagnostics

Area/Products: Pharmaceutical and Diagnostics

Brief history: Roche began in Basel, Switzerland in 1896 with the intention of industrial manufacture of medicines. Roche employ over 80,000 people worldwide and their products are used in over 150 countries. They have products in disease areas including oncology, virology, transplantation and immunology. Roche is currently considered to

be the world's biggest biotechnology company with 14 marketed biopharmaceuticals and a strong biopharma pipeline.

Presence in Puerto Rico: Roche's diagnostic division has a manufacturing plant in Ponce, Puerto Rico, employing approximately 145 people.

Website: www.roche.com

Sartorius Stedim Biotech

Area/Products: Laboratory Products & Services, Bioprocess Solutions

Brief history: Parent company Sartorius was founded in 1870, with the development of a "precision mechanical workshop" in Germany. Today, they offer two distinct divisions - bioprocess solutions and laboratory services and products. They employ about 5600 people worldwide and have a presence in 110 countries. In 2007, Sartorius' biotechnology division merged with Stedim to form Sartorius Stedim Biotech.

Presence in Puerto Rico: Sartorius has had a presence in Puerto Rico since 1982, the newest Yauco-based manufacturing plant was officially opened in 2012. The company currently employs approximately 240 staff on the island.

Website: www.sartorius.us

St Jude Medical

Area/Products: Medical Technology

Brief history: St Jude Medical was founded in 1976 with the aim of transforming treatment for some of the world's most expensive epidemic diseases. Today, their medical technology developments focus on six key areas - heart failure, arrhythmias, vascular disease, structural heart, chronic pain and neurological diseases. They employ over 16000 people worldwide and provide products to over 100 countries.

Presence in Puerto Rico: St Jude Medical have two manufacturing sites in Puerto Rico - one in Arecibo (employing over 1000 people) and one in Caguas (employing approximately 200 people). In addition, they have a sales office in San Juan.

Website: www.sjm.com

Stryker (Orthobiologics)

Area/Products: Biotechnology

Brief history: Parent company, Stryker, was founded by an orthopedic surgeon who wanted to create devices of true value to his patients - he formed the company in 1941. Stryker employ over 26000 people worldwide and their products are sold in over 100 countries. The Orthobiologics division has spent over 20 years in research and development of biological technologies to help healing and regeneration of bone, soft tissue and cartilage damage and defects.

Presence in Puerto Rico: Stryker have two manufacturing plants in Puerto Rico - one in Guayama and one in Arroyo. In total, they employ approximately 1200 people on the island.

Website: www.stryker.com

Teva (TAPI)

Area/Products: Generic Pharmaceuticals

Brief history: Teva began in 1901 in Jerusalem as a small wholesale drug distributor. Today, Teva is the world's leading generic pharmaceutical company, working in development, manufacture and marketing of generic pharmaceuticals. They do also work in the areas of branded pharmaceutical and active pharmaceutical ingredients. Teva is ranked in the top 20 pharmaceutical companies across the world and employ more than 44,000 people.

Presence in Puerto Rico: Teva acquired TAPI Puerto Rico in 2005. The three building site allows organic synthesis production as well as lab and research activities

Website: www.tapi.com

Vention

Area/Products: Medical Devices

Brief history: Beginning in 1979, Vention Medical provides contract design, manufacture and assembly services to medical device companies. They have a particular speciality in surgical and invasive components and devices.

Presence in Puerto Rico: The Puerto Rico facility, in Vega Baja, opened in 1990 and was the first Vention Medical site outside of mainland US. It was opened to increase the capabilities around injection molding and assembly, today it employs approximately 130 staff.

Website: www.ventionmedical.com

Zimmer Biomet

Area/Products: Medical Devices

Brief history: Zimmer Biomet is a healthcare company with a clear focus on musculoskeletal health care with products such as replacement joints and orthopedic trauma options. Zimmer was established in 1927, in Poland, by J.O. Zimmer. They employ approximately 8500 people worldwide and products are sold in over 100 countries.

Presence in Puerto Rico: Zimmer has a primary manufacturing site in Ponce, Puerto Rico.

Website: www.zimmer.com

Jobs Near You - Manufacturing Sites by County

Here are list of manufacturing plants from our top medtech companies list organised by county.

City / Town / Area	Company	Number of Employees	Activities
Aguadilla	Lifescan	390	Medical device manufacture
Aibonito	Baxter	4000 across the island	Medication delivery product manufacture
Anasco	Abbott	1500 across the island	
	Edwards Lifesciences	1200+	Medical device manufacture
	Integra Lifesciences		Surgical device manufacture
Arecibo	St Jude Medical	1000+	Medical device manufacture
Arroyo	Stryker	1200 across the island	Medical device manufacture
Barceloneta	Abbott	1500 across the island	
	AbbVie	1000 across the island	2 sites - one producing small molecule therapies, one manufacturing APIs & biologics
Caguas	C-Axis	50+	Contract medical manufacturing
	Mylan	400	Generic pharmaceutical manufacture
	Neolpharma	200	Pharmaceutical manufacture
	St Jude Medical	200	Medical device manufacture

City / Town / Area	Company	Number of Employees	Activities
Canovanas	AstraZeneca		
Carolina	Eli Lilly	1600	Active ingredient manufacture & oral solid dose manufacture
Cayey	Becton Dickinson	300	Diagnostic product manufacture
Dorado	BLU Caribe	250	Generic pharmaceutical manufacture
	Boston Scientific	700	Medical device manufacture
	Heraeus		Medical device component manufacture
	ProMed Caribe	100+	Medical molded product manufacture
	Scienza Labs		Lab services
Fajardo	Actavis	700 across the island	Hormone plant
	Haaemonetics		Blood management solutions
	Pall	~1000	Lifescience manufacturing
Guaynabo	Cardinal Health	75+	Medical supply distribution
	Zimmer Biomet		Medical device manufacture
Gurabo	Janssen Ortho	730+	Solid dose pharmaceutical manufacture and packaging
Guayama	Baxter	4000 across the island	Medication delivery product manufacture
	Pfizer	2500+ across the island	Pharmaceutical manufacturing
	Stryker	1200 across the island	Medical device manufacture
	TAPI (Teva)		Pharmaceutical manufacturing
Humacao	Bristol-Myers Squibb	~500	Pharmaceutical manufacturing

City / Town / Area	Company	Number of Employees	Activities
Humacao	Cardona Compounds	15+	Pharmaceutical preparation
	CR Bard	700	Medical device manufacture
	Medtronic	3000 across the island	Medical device manufacture
	Novartis	270	Pharmaceutical manufacture & packaging
	TAPI (Teva)		Pharmaceutical manufacturing
Jayuya	AbbVie	1000 across the island	Drug manufacture including mixing, compressing and packaging
	Baxter	4000 across the island	Medication delivery product manufacture
Juana Diaz	CooperVision		Contact lens manufacture
Juncos	Amgen	1000	Biotechnology bulk manufacture
	Becton Dickinson	200	Medical device manufacture
	Medtronic	3000 across the island	Medical device manufacture
Las Piedras	Hill-Rom	230	Surgical device manufacture
	McNeil	800	Pharmaceutical manufacture
	Merck	~400	Pharmaceutical manufacture
Manati	Actavis	700 across the island	Solid dose manufacturing & packaging
	Bristol-Myers Squibb	450	Aseptic processing, filling and packing of pharmaceutical product
	Patheon	~500	Contract pharmaceutical development and manufacture services

City / Town / Area	Company	Number of Employees	Activities
Mayaguez	CDI Laboratories	~20	Research & development services
Ponce	Ci Medical Technologies	83	Injection-molded component manufacture
	Covidien (Medtronic)	2200	Medical device manufacture
	Roche Diagnostics	145	Medical device manufacture
	Zimmer Biomet		Medical device manufacture
Salinas	Steri-Tech	30+	Sterilization services
San German	Pace Analytical	65+	Contract laboratory services
San Lorenzo	Becton Dickinson	300	Medical device manufacture
	Ethicon		Medical device manufacture
Vega Alta	Steris Isomedix	20+	Sterilization services
Vega Baja	Pfizer	2500+ across the island	Pharmaceutical manufacturing
	Vention	130	Medical device and component manufacture
Villalba	Medtronic	3000 across the island	Medical device manufacture
Yauco	Sartorius Stedim Biotech	240	Biopharmaceutical manufacturing
	Servier	400	Manufacture of finished pharmaceutical product.
	Sigma-Aldrich		Manufacture of generic and custom active pharmaceutical ingredients.
	Takeda	400	Drug product manufacture.

Organizations You Should to Know

The Food and Drug Administration (**FDA** or **USFDA**) is an agency of the United States Department of Health and Human Services and is responsible for protecting and promoting public health through the regulation and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation,cosmetics, emitting devices (ERED), and veterinary products.

The International Society for Pharmaceutical Engineering (**ISPE**) is a not-for-profit industry trade group for pharmaceutical science and manufacturing professionals. It has 25,000 members in more than 90 countries. The ISPE provides pharmaceutical industry professionals with opportunities to develop technical knowledge, exchange practical experience, and collaborate with global regulatory agencies and industry leaders.

The Parenteral Drug Association (**PDA**) is an international non-profit industry trade group for pharmaceutical and biopharmaceutical manufacturers. Founded in 1946 as the Parenteral Drug Association by a small group of pharmaceutical manufacturers who recognized the need for an organization to disseminate technical information within the industry, it now has more than 11,000 members worldwide. Today, coordinated through its headquarters and its Training & Research Institute in Bethesda, Maryland, PDA volunteers worldwide promote the exchange of rapidly evolving information on the latest technology and regulations concerning high-quality pharmaceutical production.

The World Health Organization (**WHO**) is a specialized global agency that is concerned with direction and coordination of international public health. It was established on 7 April 1948, with its headquarters in Geneva, Switzerland and an aim of providing leadership in public health globally. Today, more than 7,000 people from 150 countries work for WHO worldwide covering 194 member states. WHO affects public health by monitoring health trends, setting health standards, shaping the research agenda and providing leadership.

Resume Templates for Pharmaceutical Jobs

So it's been awhile since you had to put together a Resume and you're not sure on how to get started. Well, we put together two Resume templates with a pharma focus to help you out with this.

Download them from this page on our website

http://www.getreskilled.com/pharmaceutical-jobs/cv-templates

Job Hunt Progress Form

Job hunting can involve a lot of applications and it can be easy to lose track. Print this form out and use it to keep track of the applications you've submitted. And on days when you're feeling like you're making slow progress, this also lets you see just how much you're achieving in your job hunt.

Download here:

http://bit.ly/1OOhLdk

Interview Preparation Form

Interviews are a stressful time for everyone. To help take the stress out of interview day, we've compiled this sheet to print out, fill in and take with you on interview day. It means you've got all the company information in one place and gives you key points to look over if you get a few spare minutes before the interview.

Download here:

http://bit.ly/1OOhZ4n

Part 6: What now?

"I would rate the course 10 out 10 and would highly recommend to others, very interesting, informative and very well presented. Relevant totally to my needs and expectations. The most practical course I have ever attended."
Andy Wnuk, MSc (Eng) MIEI

So there you have it. If you're thinking about a change of career, those are the steps you need to take to give yourself the best chance at a successful change.

If you've worked in a technical role previously, then you'll probably be surprised at how close you are to being an ideal candidate for the pharma and medical device industries. Reskilling wouldn't be starting something from scratch, it would be starting something a few strides away from the finish line.

Contact us here at GetReskilled to talk through your options in more detail with an expert.

You can:

Call us: 787 200 2954 (Main); 1-844 WE-SKILL (Toll Free)

Email us - geraldine.creaner@getreskilled.com

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