Pre-registration Pharmacist
Industry Information Pack

AstraZeneca
Bristol-Myers Squibb
gsk
MSD
Pfizer
Sponsors and Contributors

- gsk
- AstraZeneca
- Bristol-Myers Squibb
- MSD
- Pfizer
- EIPG
- British Pharmaceutical Students’ Association
- Royal Pharmaceutical Society
- Industrial Pharmacy Forum
- GPIE
Dear Undergraduate Pharmacist

If you are reading this page then you may be considering a career in the pharmaceutical industry, so congratulations on picking up this brochure.

This brochure has been designed with you, the undergraduate pharmacist, in mind. Previous students have aided in the design of this brochure.

The aim of this brochure is to tell you a little about the global pharmaceutical companies that offer pre-registration Pharmacist training; namely AstraZeneca, Bristol-Myers Squibb, GSK, MSD and Pfizer. It also includes information on the wide range of roles carried out by scientists in the pharmaceutical industry and provides answers to some of your frequently asked questions. We also recognise that you may be attending interviews or applying for jobs for the first time, so we have included our Candidates Interview Handbook to assist you in preparing for those crucial interviews.

We hope you will find this booklet useful.

We would also like to wish you well for your studies and your future career.

AstraZeneca, Bristol-Myers Squibb, GSK, MSD and Pfizer Pre-registration Pharmacist Training Teams
The Interview – Candidate’s Handbook

Introduction
Getting Started
Research the position
Reviewing Key Responsibilities/Accountabilities
Reviewing Key Capabilities and Experience
Updating your CV (Résumé)
Content (in order of appearance)
Format
Preparing for the Interview
Final Preparations
Day of the Interview
Physical and Mental Preparation
Introductions
Your Turn

Scientific Conferences of Interest

Useful Links and Notes
Global Pharmaceutical Companies
UK Pre-registration Pharmacist Training Sites

Bristol-Myers Squibb
AstraZeneca
MSD
GSK
Pfizer
There are two routes to becoming a pharmacist if you study in Great Britain, a 4-year accredited degree (MPharm) or a 1-year accredited Overseas Pharmacists’ assessment Programme (OSPAP). After successful completion of the MPharm or OSPAP you will be eligible to commence pre-registration training provided all other General Pharmaceutical Council (GPhC) requirements are met.

Pre-registration trainee pharmacists must complete a minimum 52 weeks of satisfactory supervised and assessed training in employment and pass the Registration Assessment for eligibility to join the Register. All trainees are required to achieve competence in a defined set of Performance Standards during their 52-week training programme. The 52-week programme can either be undertaken in a patient centred sector (Community or Hospital) or as part of a joint programme where a minimum of 6 months is spent at any of the former and the remaining 6 months in the Industry. Trainees can undertake Cross Sector Experience (CSE), whereby trainees in hospital undertake two weeks in community and vice versa in order to understand the range of pharmacy services available to patients.

The current GPhC regulations also permit a pre-registration trainee (based in a patient centred sector) to spend a maximum of one week during their training year in an unapproved site and this can be in the Industry. This is not classed as Cross Sector Experience (where it is recommended that a pre-registration trainee gains experience of at least two patient-centred sectors of practice, in the hospital or in the community for up to 4 weeks). For further information about pre-registration training, go the GPhC website at www.pharmacyregulation.org

General Pharmaceutical Council (GPhC) Requirements for European Qualified Pharmacists

For European qualified pharmacists who wish to practice in the UK, there will be individual requirements to be met. Contact the GPhC at www.pharmacyregulation.org for specific information.

Advice for Guidance on Visas

For information regarding visas, go to the Royal Pharmaceutical Society (RPS) website at www.rpharms.com
Royal Pharmaceutical Society - Industrial Pharmacy Forum

Goals
To advise and influence the governing bodies of the pharmacy profession in their policy development and on developments in the pharmaceutical industry that may affect the future of the profession.

To promote careers in the pharmaceutical industry to students, graduates and pharmacists and to promote the value of pharmacists to industrial employers in order to increase the talent pool of industrial pharmacists.

To influence curriculum and competent development programmes to ensure graduates and pharmacists have the necessary skills and knowledge for successful careers within the industry.

To support industrial pharmacists throughout their careers by ensuring the provision of high quality competency development programmes and forums for networking and practice sharing.

Memberships
The Royal Pharmaceutical Society (RPS) currently has 1670 industrial pharmacists amongst the 27,264 (not including students) total pharmacist membership. Since the introduction of the pharmaceutical scientist membership category the number of Scientist members is approximately 50.

The EIPG Journal continues to be circulated to the members of the online Industrial Pharmacy Forum and to Schools of Pharmacy. It is also on the RPS website; it is very well received.

Involvement in Policy
The national governing body includes a specific representative for Industrial Pharmacy. Industrial pharmacists are represented in the RPS Expert Advisory Panels for Science and for Education. Industrial pharmacist input has been given in discussions on the set up of the RPS Faculty.

Schools Involvement
Visits to Schools of Pharmacy remains a focus of activity for the IPF and can be part of a careers fair, half day visit by a team of pharmacists working in the Industry or as part of the Professional Body visits. An enthusiastic response is the usual reaction from students.
Membership of the BPSA

By becoming a member of the British Pharmaceutical Students’ Association (BPSA) you will benefit from an excellent representation in the world of pharmacy. As a student member of the BPSA, you are automatically a member of the Royal Pharmaceutical Society and can benefit from the services both organisations provide.

Pre-registration Trainee Membership

As a pre-registration trainee in England, Scotland and Wales you are eligible to join the BPSA for FREE! You are able to access various services, professional development opportunities and information that will aid you during your preregistration training year.

What the BPSA offers

- Representation
- Legal advice
- Graduate conferences
- Graduate Magazines
- Pre-registration Bulletin
- Access to other organisations

In order to become a pre-registration member of the BPSA, please contact the Graduate Officer and provide the following details:

- Your full name & title (e.g. Mr / Mrs / Miss, etc)
- Email address (preferably work email)
- Postal address (including postcode)
- Mobile phone number

For more information about the BPSA pre-registration membership go to www.bpsa.co.uk
A Pharmacy degree in the pharmaceutical industry is the most holistic of science disciplines. As a pre-registration pharmacist, in addition to a competitive salary and benefits, you can expect an exciting, challenging and rewarding placement from the Global Pharmaceutical Industry Leaders.

Working in the pharmaceutical industry means that you will be part of a multi discipline team, and you will work alongside other scientists such as chemists, biologists, chemical engineers and statisticians to name but a few. Working alongside people from these and other scientific disciplines will enable you to widen or enhance your own knowledge and to understand more of their particular areas of expertise. You will be respected as a graduate and with other team members you will actively contribute to progressing compounds towards market for patients that are waiting for the new medicines.

Each day the pharmaceutical industry presents with new and different challenges since drug development is anything but routine. You will have the opportunity to apply skills and knowledge learnt at University, and in addition share and suggest your own technical ideas to solve problems. As a result of the wide variety of work undertaken, you may find yourself in differing environments, from desk to the lab to the manufacturing plant. Of course, undertaking the work in the team requires knowledge sharing and you will be encouraged to present your findings or results to your peers and hence develop skills such as communication and presentation.

Getting a drug to market or supporting it after it reaches the market is not the sole responsibility of one department, e.g. pharmaceutical development. Whilst in the industry, visits to other departments such as Quality Assurance, Regulatory Affairs, Marketing and Pharmacovigilence will enable you to gain an appreciation of how it requires many different groups to work together to achieve success.

Focussing on the patient is the priority in the pharmaceutical industry. Dose form selection or design, drug interactions, taste masking, preparing clinical supplies and patient testimonials will all raise your awareness of considerations that need to be made in order that the patient understands and is compliant with their medicines. There is no better reward than to hear a patient say that their quality of life has improved as a result of the development and subsequent availability of a new medicine.
Pharmaceutical Development & Manufacturing in the Pharmaceutical Industry

Scientists engaging in research and development play a key role in the development process to transform promising drug candidates into successful marketed drug products and to transform marketed drug products into the next generation of improved drug products (Product Line Extensions, PLEs). Both types of product play an important role in improving the lives of patients.

In research and development, scientists are responsible for the development of formulations for dosing in First Time in Human and other clinical studies up until the achievement of proof of concept (PoC) for the compound. There is an emphasis on simple formulations to ensure the questions that need to be addressed before PoC can be declared are answered as effectively and efficiently as possible. The use of the term ‘simple’ should not detract from the complexity of this activity ranging from the generation of information on compounds which have never been tested before, to the creation of formulations which balance simplicity with ensuring the compound is given the best chance of being successful. One of the challenges is with compounds which are poorly soluble or need to be administered at either very low or very high doses and these require particular formulation expertise and may require the application of particular technologies. Individuals are experts in formulation development, analytical chemistry, physical property determinations and biopharmaceutics (linking compound or formulation characteristics to biological exposure). The group interacts closely with a number of other functions in particular chemical development, drug metabolism and pharmacokinetics, and clinical pharmacology. In addition the drug discovery group will help design the molecule in the first place and is subsequently involved in the support to the clinical studies.

Research and development scientists also work closely with their colleagues in other departments to progress compounds having optimal chemical and physical properties that aid in the development and manufacture of robust drug products. In addition to understanding the importance of chemical and physical properties, they must also be mindful of how their products perform when dosed in humans. Depending on the needs of the target patient population, these scientists are responsible for developing and manufacturing different types of formulations including tablets, capsules, injectables, topicals and eye drops. When a compound reaches the later stages of clinical testing in humans, these scientists work closely with their colleagues in manufacturing to ensure the smooth transfer of the technology associated with the drug product to the site where the marketed drug product will be made.

Quality Systems

Quality systems are essential to the work in pre-clinical development and Good Manufacturing Practice standards are applied to all development and manufacturing campaigns. The release of any clinical or commercial supply is ultimately the responsibility of the Qualified Person.

Analytical Sciences

Within research and development, the scientists are a multi-functional group of analytical and physical chemists, automation engineers, microbiologists and information systems specialists. These groups work closely to develop and use appropriate analytical methods to test drug products.

Analytical Sciences underpins all of our formulation development and manufacturing work and is the key tool in ensuring that our products are chemically and physically stable, and that their quality is maintained during all stages of clinical development through to commercialisation.

The work of the analytical scientists may include the design and implementation of stability protocols for accelerated stability testing and shelf-life prediction. In addition, analytical scientists deliver high-throughput and efficient testing of late stage drug products and the development or implementing of novel and off the shelf analytical automation platforms product testing. In addition, state of the art technologies will be used to determine the physical properties of drug molecules and products at all stages of development and manufacture. These properties are typically critical to determining the processing and biological properties of the drug, as well as the stability and manufacturability.

Manufacturing Teams

Our manufacturing teams are an integral part of the clinical trials supply chain. The remit of the group is to manufacture clinical trials supplies to support clinical studies required to bring safe, new and improved drugs to the market as quickly as possible, so that patients can benefit at the earliest opportunity.

Manufacturing scientists work closely alongside development colleagues to take a formulation/process and manufacture clinical supplies to cGMP standards to support new and ongoing studies. As projects develop and there is a requirement to scale up the batch sizes, manufacturing scientists work with their development
colleagues, and the factory network to make sure that the formulations and manufacturing processes are robust and that there is a smooth handover of the commercial process into the factories.

Another important part of the group’s work is to manufacture ‘blinded’ comparator products - marketed products are manipulated in such a way that the patient and investigator cannot identify them.

Working in manufacturing gives opportunities to develop expertise and understanding in pharmaceutical manufacture, across a wide variety of unit operations and novel technologies. It also provides the opportunity to work in multi-disciplinary teams with functions across the clinical supply chain. The work is varied and challenging and for those interested, can provide opportunities to travel to other manufacturing facilities worldwide.

Clinical Supply Teams

Clinical supply teams are responsible for designing and delivering clinical supply to patients. Their remit falls into 4 key areas; supply chain management, pack design, packaging operations and logistics. Clinical supply teams work with partners in pre-clinical to develop the clinical supply demand forecast and ensure that a robust supply chain is put in place to support global development programmes.

The clinical supply teams are responsible for interpreting the clinical protocol and ensuring the clinical supply is designed to meet the needs of both the patient and the clinical study. Packaging teams utilise automated, high speed packaging and labelling capability to produce patient packs in different languages that are sent to global high tech distribution centres. The clinical supply teams also provide active drugs, blinded comparators and placebos in packs to take account of the needs of the patients.

Process Understanding

Process technologists lead the development of fundamental process understanding in order to enhance and control manufacturing processes. To this end, the process technologists are responsible for ensuring technical excellence with respect to the industrialisation and application of first intent manufacturing technology platforms for new product development, launch and supply.

Process Engineers apply the principles of chemical engineering in order to develop a robust knowledge of process progression and an understanding of how equipment, materials and environmental factors influence process outcome and product performance with the aim of more closely controlling the process outcome and product quality. Process Engineering uses a multidisciplinary and multiscale approach to integrate what happens at the particle scale with what happens at the batch scale.

Scientists are also responsible for supporting pre clinical development teams as they develop new products and line extensions for the patient. The group provide insight and experience to make the transition from pre clinical to manufacturing more predictable and to support the development of manufacturing processes for products that will be robust in a variety of manufacturing environments and equipments. The group fully support and are aligned with FDA’s PAT Initiative, Quality by Design, and Design for Manufacture.

Chemometrics in a pharmaceutical context, can be simply thought of as the application of multivariate (i.e. analysing several variables) statistical techniques, to product and process development. All but the simplest pharmaceutical formulation/processes are by definition multivariate. To efficiently process multivariate inputs (e.g. near-infrared) necessitates the use of multivariate analysis techniques.

The goal of these analyses is to summarise and/or model all data collected and to provide information in a condensed form. The information provided can then provide insight into formulation and process development that could be used to develop a Design Space or perhaps root cause unexpected results.
# New Drug Research and Development Phases

## PRE PHASE/PHASE 1

**DISCOVER DRUG & CANDIDATE TO COMMIT TO HUMANS**
Identify Drug Substance, prove that it can be developed and take it forward for testing in first human study.

### 0-18 MONTHS
- Assess developability using first batch of Drug Substance
- Select Version and Physical Form
- Preliminary Formulation for Toxicology
- Develop First Time in Human Formulation
- Confirm Physical Form
- Drug Substance Stability
- Support Investigation of New Drug/Clinical Trials Application activities
- Analysis of Key Batches of Drug Substance and Drug Product and Process Stretching

## PHASE 2

**COMMITE PRODUCT TO FURTHER DEVELOPMENT**
Supporting Phase 2 clinical studies & further formulation development and scale up to ensure product will be viable.

### 2-3 YEARS
- Lock Final Isolation of Drug Substance
- Select Final Route of Manufacture of Drug Substance
- Product Sourcing Decision
- Lock final Formulation and Process
- Commercial image & pack defined
- Initiate Technical Transfer
- Further Formulation Development and Scale up
- Analysis of Key Batches of Drug Substance and Drug Product and Process Stretching

## PHASE 3

**FILE AND LAUNCH**
Finalise formulation stability studies collect data for regulatory submission work manufacturing drug application.

### 2-4 YEARS
- Scale Up at Manufacturing Site
- Initiate and provide input to New Drug Application/Investigation of Medicinal Product Dossier
- Prepare For Regulatory Inspections
- Respond to Regulatory Questions
- Validation batches
- Analysis of Key Batches of Drug Substance and Drug Product and Process Design Space
"The project I was working on was very challenging but with the constant support and guidance I received, the work was very manageable and I thoroughly enjoyed every bit of it."

"I joined the pharmaceutical industry from the community sector, where I managed pharmacies and had daily contact with patients and physicians, I thought I would miss this direct contact and seeing where I am making a real difference to the patient. However, I quickly discovered that working in the pharmaceutical industry was quite similar, but just on a much larger scale! When I first started, I was checking hundreds of labelled packs for clinical trials against an order - so this was much like dispensing a prescription, but for lots of patients. My training as a pharmacist has given me an understanding of the needs of patients and physicians in a clinical trial setting for different therapeutic areas. In my role as a Projects Leader, I am able to directly influence the design of clinical trials and co-ordinate the activities required to ensure that the product reaches the patient. I work in a matrix team environment which involves interfacing with people in various other business functions. As a project team, we work together to find the best way to move forward and achieve our goal. Each day is different and brings new challenges and this dynamic environment makes the work varied and interesting.

"The pre-registration year gave us the opportunity to gain valuable experience of the pharmaceutical industry, from drug discovery to final product release."

"The industry pre-registration is one of the most challenging experiences of your pharmacy career. Highly recommended!"

"It is a fantastic experience to undertake an industry pre-registration placement and you have a wide variety of opportunities and get to meet a lot of people from different areas."

"Determined to formulate my future in pharmacy, I supplemented my undergraduate pharmacy training with challenging work opportunities in the pharmaceutical industry, NHS hospitals and community pharmacy. I completed part of my pre-registration training with the pharmaceutical industry working in product research and development where I was involved in late-stage drug product development. I generated, analysed and evaluated developmental physical property data on a tablet formulation and presented the results to the team to discuss and make key development decisions. It was an exciting and rewarding experience working alongside a multidisciplinary team of chemists, statisticians and other pharmacists. Since qualifying as a pharmacist, I now work in Clinical Safety and Pharmacovigilence within the pharmaceutical industry. My current role focuses on analysing drug safety data and reporting to worldwide regulatory authorities."

"I'm working on a very interesting research project relating to tablet formulation science. It has allowed me to gain new skills and apply theoretical science into making good tablets that will be practical for the patient to take."
The Pharmaceutical Companies

AstraZeneca
Welcome to career opportunities in our Pharmaceutical Development Function and Operations.

Based in Macclesfield (Cheshire) we are on a journey to build the most competitive function in our field for the benefit of our people, our projects and patients; a team that is recognised within AstraZeneca and by industry peers as the best and where talented people aspire to work and build a career.

We are passionate about delivering cutting edge science to develop and deliver medicines that make a difference to patients’ lives.

Summer Placements

We recruit pharmacy summer placement students for projects in Operations and Pharmaceutical Development (including Product Development and R&D Supply Chain).

Summer Placements are reserved for 3rd Year Pharmacy students and allow an insight into the variety of roles in the pharmaceutical industry via 10 week placements. Summer placement positions are available at our Macclesfield site.

On completion of these placements there is opportunity to apply for a Pre-registration position.

Pre-registration Placements

Currently we recruit for two Pre-registration positions within Pharmaceutical Development, in conjunction with the Wythenshawe Hospital as our clinical training partner.

As a large teaching hospital Wythenshawe offer an excellent standard of clinical training achieved using a rotation through a variety of clinical specialties. This coupled with experience in the pharmacy department allows for a fantastic insight into hospital pharmacy.

AstraZeneca activities are based in Pharmaceutical Development and tend to be in cutting edge science in R&D although we constantly seek interesting opportunities in associated departments; tailoring the experience to the aspirations of the trainee where possible.

How to Apply

Our pre-registration trainees are selected from our pool of summer students so to access the pre-registration opportunity application for the summer placement is essential.

Summer student applications are open mid November to mid January via the online application form.

For application details follow the careers link found at http://www.astrazeneca.co.uk/careers/ or http://gs.globalsuccessor.com/fe/tp1_astrazenecav2.asp

Graduate Schemes

Pharmaceutical Development and Operations both run Graduate programmes that involve placements at the Macclesfield site.

Pharmaceutical Development

This is a two year programme and includes three distinct rotations through different areas of Pharmaceutical Development, providing a broad exposure to multiple areas of basic and applied scientific research. The focus is for you to gain as broad an experience of the drug development and commercialisation process as possible working on real science and projects. Applications are open October to December via the online application form.

Operations

This is currently a three year programme and includes four distinct rotations through different areas of Operations, one of which is normally at an overseas site and one may also be a twelve month consolidation in a role appropriate to the candidate’s aptitude and interest. The scheme is open to all scientific disciplines and would be attractive to any graduate looking for experience of people/business management early in their career or those interested in QP training. Applications open in October for recruitment in the following September, apply via the online application form.
The Pharmaceutical Companies

Bristol-Myers Squibb
Pre-registration Pharmacist Training at Bristol-Myers Squibb

Bristol-Myers Squibb and St. Helens and Knowsley Hospitals NHS Trust

A comprehensive joint training programme in both industrial and hospital pharmacy is provided to pharmacy pre-registration graduates. The training comprises a six month training period in the Drug Product Science & Technology department at Moreton and a further six month training period at St. Helens and Knowsley Teaching Hospitals NHS Trust in Prescot, Merseyside.

The UK Moreton site forms part of Bristol-Myers Squibb Research & Development. The operation has close links with R&D centres in the USA, Europe and Asia, and undertakes all aspects of oral formulation development and clinical supply operations for a range of new and existing chemical entities. The Moreton site is located on the Wirral peninsula some six miles from Liverpool city centre and 20 miles north of Chester and is easily accessible by rail or motorway. It is conveniently situated to access the recreational facilities of North Wales, the Lake District and the Peak District. BMS offer a competitive salary and a range of benefits including flexible working, 25 days holiday per year, an on-site gym and subsidised canteen facilities.

St. Helens and Knowsley Teaching Hospitals NHS Trust consists of Whiston Hospital, where the pre-registration training is based, and St. Helens Hospital. The Trust has in excess of 900 beds and provide for most major specialities including intensive care, maternitity services, oncology and haematology, cardiology, burns and plastics and respiratory medicine. In addition to these specialities, pharmacy services are provided to mental health, dermatology, paediatrics, rheumatology and gastroenterology. Furthermore, Trust achieved the highest rating of ‘DOUBLE EXCELLENT’ in 2008 and 2009 from the Care Quality Commission.

The Industrial Training Programme

The pre-registration student is based in the Drug Product Science & Technology department where the formulation of primarily solid dosage forms of new chemical entities is undertaken. Experienced scientists (many are qualified Pharmacists) are available to assist and advise where necessary. The emphasis is placed on the student developing their own skills in experiment design, data collection and interpretation, and the presentation of data. During the six month training period, the student will apply knowledge gained at University and the skills acquired during the placement to make a positive contribution to the department’s research activities by undertaking a practical research project.

We are committed to giving the trainee an insight into the career options available within the pharmaceutical industry and an understanding of the different disciplines which interact to bring drug products to the market. Additional experience of the development process is gained through visits to the Analytical and Bioanalytical Development, Quality Operations and Clinical Supply Operation departments at Moreton. The student also has the opportunity to visit BMS UK Head Office in London, where the UK Regulatory Affairs, Medical Information, Business Effectiveness & Planning and Clinical Operations functions are based.

In addition to providing industrial sector experience, training and support will be provided to enable the student to achieve competence in the Performance Standards defined by the General Pharmaceutical Council (GPhC). Furthermore, the student will also attend local and regional NHS study days during the industrial placement period.
The Hospital Training Programme

The Trust provides pre-registration graduate training for 3 full-time graduates and 2 split-training placements with BMS.

All graduates are based at Whiston Hospital, which is a modern hospital with excellent facilities. The Pharmacy Department comprises inpatient and outpatient dispensaries, medicines information and an aseptic dispensing unit. The department consists of approximately 80 staff members providing a friendly environment and the support of an excellent team of clinical pharmacists. Visits to St. Helens Hospital are also included as part of the pre-registration programme.

The pre-registration graduate follows a planned course of training covering all aspects of the GPhC pre-registration syllabus. Additionally, students will undertake a personal project that will provide a learning experience and will be a genuine contribution to the department. The timetable is split into a series of weekly sessions in different areas of the pharmacy as follows:

- Inpatient dispensary (7 weeks)
- Outpatient dispensary (3 weeks)
- Aseptic Dispensary unit (4 weeks)
- Medicines Information (4 weeks)
- Stores (1 week)
- Audit and Drug Use Review (2 weeks)
- Intermediate Care (1 week)
- St Helens Dispensary (1 week)
- Study time for project work (3 weeks).

In addition to this training programme, a clinical training timetable runs concurrently which allows each graduate to spend time on wards with senior clinical pharmacists. Graduates will undertake clinical training in cardiology, geriatrics, gastroenterology, respiratory medicine, general surgery and orthopaedics and have some responsibility for providing pharmaceutical care to such patients.

Graduates are also included in other activities such as:

1. Regular study days in conjunction with other pre-registration graduates from the Merseyside area (approximately 20 students). The study days are run by pharmacists and other healthcare professionals and address clinical topics as well as the syllabus for the pre-registration examination. They also provide an opportunity to meet other pre-registration graduates from the local area. Graduates attend these study days during their hospital and industrial placement periods.
2. Regional study days held on a monthly basis run with graduates from the North West region (approximately 65 students). The days cover more of the strategic developments and current issues affecting the NHS and also provide mandatory First Aid training and mock pre-registration examinations.

The Application Procedure

Please submit your applications online at www.bms.com/careers

Other Useful Information

Accommodation, if required, is usually available at Whiston Hospital at a reasonable rate. Rented accommodation is also available in the local area and in Liverpool, where there is a large student population. A frequent rail service exists to both Liverpool and Manchester, both of which provide excellent facilities for shopping and entertainment. Leisure centres, swimming pools, rugby, football and cricket grounds, theatres and cinemas, are all available in the local area.
The Pharmaceutical Companies
As one of the World’s leading pharmaceutical companies GSK (GSK) is committed to the development of the Pharmaceutical Sciences in the UK. The Pharmaceutical Development department at GSK is actively looking to engage with emerging scientists to encourage them in their studies and highlight to them the exciting opportunities that the Pharmaceutical Industry offers.

GSK has a number of Student and Emerging Scientist Initiatives. Our complete range of schemes is listed below.

Summer Placement
- Paid work experience for students from all science disciplines to spend 8-12 weeks at GSK

The GSK Summer Experience
- Paid structured work experience placements for Pharmacy/Pharmaceutical Scientist undergraduates for 10 weeks. The best students will then be offered Pre-registration Pharmacist interviews or additional work placements

GSK Poster Awards for Undergraduates and Postgraduates
- Poster awards for graduates/undergraduates with cash prizes at Academy of Pharmaceutical Sciences Sponsored Conferences.

GSK National Hot Topic Award
- Undergraduate, Masters or PhD students are invited to submit a short article on a chosen topic. The author of the best article to receive a cash prize and expenses paid conference attendance at the Industrial insights conference.

Pre-registration Pharmacist Training
- Annually we recruit a number of pharmacy graduates for the GSK Pre-registration Pharmacist training scheme. The GSK placement comprises a 6 month training period at our state of the art research and development laboratories with the remaining 6 months placement at one of our partnering NHS Trusts.

GSK Emerging Scientist Award
- Awarded to researchers who have demonstrated a substantial advancement in the application of scientific knowledge within the pharmaceutical sciences through published work within 10 years of their first graduation are able to apply. The award winner will present their work at UK Pharm Sci and receive a cash prize.

Graduate programme
- Our science and engineering activities are critical functions that enable GSK to register and launch three to five new medicines each year.

If you are on track for, or have achieved, at least a 2.1 (or equivalent) Bachelors or Masters degree or a PhD in a scientific or engineering discipline then the Product Development Future Leaders Programme could be the next step for you.

Look out for details on futureleaders.gsk.com
Each year GSK recruit pharmacy graduates into our GSK pre-registration training scheme. The GSK pre-registration placement comprises a six month training period at our state of the art research and development or manufacturing facilities in Essex and Hertfordshire and a further six months is completed either at The Princess Alexandra NHS Trust, Harlow or Basildon & Thurrock University Hospital NHS Foundation Trust, Basildon or Barts Health NHS Trust, London, North Middlesex University Hospital and Addenbrooke’s Hospital (Cambridge University Hospitals).

During the placement you will cover all of the General Pharmaceutical Council (GPhC) competencies. In addition, you will start to develop other transferable skills such as time management, presentation and communication skills. Overall, our aim for your pre-registration year is to develop you into a high quality, well rounded pharmacist. Throughout your placement, whether in industry or the NHS you will contribute to the running of the pharmacy, product development or manufacturing team.

During your industry placement, you will be placed in a team with an active compound and will aid in the progression of the compound. In addition, you will attend locally organised study days with other pre-registration pharmacists in order to gain knowledge through group training sessions. You will benefit from a competitive salary and 26 days holiday per annum.

During your six months on site with GSK, you will be interacting regularly with other pharmacists and scientists of different disciplines. In addition you will be given the opportunity to build your understanding of a major global pharmaceutical company by visiting other departments. These departments will include:

- Marketing
- Regulatory
- Manufacturing

During your NHS placement you will have the opportunity to rotate through different departments. Typically, the departments may include:

- Medicines Information
- Clinical Pharmacy
- Quality Control

Finally you will spend a two week placement in a community pharmacy to provide you with experience of all three major pharmacy disciplines.

Here you will gain an understanding of ailments and conditions that can be treated with over the counter medicines (OTC) and the counselling required before sales can be made. You will also become aware of dispensing Pharmacy Only Medicines (POM’s) and advanced pharmacy services such as Medicines Use Reviews (MUR’s), Smoking Cessation and Health Checks.

Overall, the pharmaceutical industry/NHS Trust split pre-registration year is challenging but rewarding.

How to Apply

Please submit your applications online at www.gsk.com/careers.

Positions are open for applications annually from June through August for pre-registration placements commencing in the following year. The interview process will be conducted and outcomes communicated during September of each year.
The Pharmaceutical Companies
Pre-registration Pharmacist Training at MSD

In partnership with Guy’s and St. Thomas’ Hospital

Today’s MSD is a global healthcare leader working to help the world be well. Through our prescription medicines, vaccines, biologic therapies, and animal health products, we work with customers and operate in more than 140 countries to deliver innovative health solutions.

Each year we recruit a number of graduates in pharmacy to be employed for General Pharmaceutical Council (GPhC) accredited pre-registration training. The training will be completed within our Early Development Centre at Hoddesdon, an integral part of our Pharmaceutical Sciences and Clinical Supply laboratories, which undertake a wide range of drug development activities to turn novel drug candidates into medicines. The placement year provides an integrated training programme, which involves working within a research setting in a pharmaceutical company and a placement in a hospital setting, working at Guy’s and St Thomas’ Hospital.

During your 6 month placement at MSD, you will be working on your own research project, related to a current development program, with a defined topic and scope.

Being supervised by an experienced member of staff, this will be the ideal opportunity for you to apply your knowledge of fundamental scientific principles to finding solutions to challenging questions in pharmaceutical research and development. You will be expected to use your initiative and creativity to influence the course of this project.

During your comprehensive, multi-disciplinary training, you will also have the opportunity to network with pharmacists, scientists and engineers working in different areas of the company, including:

- Formulation / Analytical sciences
- Analytical sciences
- Process chemistry
- Clinical research
- Marketing
- Quality assurance
- Medical information

Your placement at Guy’s and St. Thomas’ Hospital will provide you with 6 months clinical experience in the hospital sector. Guy’s and St Thomas’ Hospitals are two of London’s most well-known teaching hospitals and together are one of the busiest NHS Foundation Trusts, providing a full range of pharmacy services. Your clinical training will be augmented by group study days where you will be able to network with other pre-registration students from across the region and share knowledge and experiences. These study days will also be supported during your training period at MSD.

Applying

Please apply online at http://www.msd-uk.com/careers.

Generally, the closing date for applications is in July/August with interviews being held in early September.

For more information on MSD, please visit our website at www.msd-uk.com. Further information about the hospital training at GSTT can be found at http://www.guysandstthomas.nhs.uk/careers/other-types-of-work/pharmacy-work-experience.aspx.
The Pharmaceutical Companies

Pfizer
Pre-registration Pharmacist Training at Pfizer

Pfizer Worldwide Research and Development (WRD) recruit graduates in pharmacy each year into an exciting pre-registration training experience. The training comprises a six month period in the Pharmaceutical Sciences laboratories at Sandwich and a six month training period at a clinical partner site. We are currently partnering with Addenbrooke’s Hospital, of the Cambridge University Hospitals NHS Foundation Trust, Cambridge as our clinical provider.

The year provides an integrated training program, which covers all of the General Pharmaceutical Council (GPhC) guidelines and is intended to produce high quality pharmacists with a working knowledge of industrial and hospital pharmacy.

Throughout your placement, you’ll contribute to live departmental projects and be given real responsibility. It’s a fantastic opportunity to gain an insight into how one of the world’s leading pharmaceutical companies operates, while advancing your own academic knowledge and technical skills. What’s more, you’ll enjoy a competitive salary and generous holiday entitlement as well as a wide range of benefits.

During your time at Pfizer you will be assigned a 3-4 month project in a Pharmaceutical Sciences department. The placement may be laboratory based (for example as a formulation scientist) or non-laboratory based (for example a regulatory role in Global Chemistry, Manufacturing & Controls).

During your project you will be integrated into your departmental team and will get the opportunity to liaise with pharmacists and scientists in other disciplines.

You will also get the opportunity to spend time in additional key areas:

- Pharmaceutical production
- Clinical Sciences
- Analytical and Chemical Research and Development
- Global Chemistry, Manufacturing & Controls
- Quality Assurance
- Medical Information

During the Clinical placement, you will have the opportunity to gain all the relevant GPhC competencies, including Dispensary, Clinical Pharmacy, Drug Information and Quality Control.

Your clinical placement will also provide you with group learning days where you will be able to meet with other pre-registration students from across the region and share knowledge. These days are also supported during your time at Pfizer. We have a supporting team of mentors who will help you develop and maintain your clinical knowledge during your time in the industrial setting.

During the course of the year you will also complete a cross sector placement where you will spend 2 weeks in a community pharmacy site to ensure experience in all three disciplines.

Applying

Please apply online at www.pfizercareers.com

The website will be open to applications from June to the end of July.

Interviews will be held during September. All applications are welcome.
The Good Student Guide for Pharmacists
Pharmacy Students
What to do and When

**‘A’ Level Students**

**WHAT**
Check company websites for vacation job opportunities

**WHEN**
Apply: Autumn-Spring prior to taking ‘A’ levels
Occurs: Summer prior to University start date

**HINT**
To help you prepare for the interview, research the company you are applying to

**TIP**
List all exam results & dates in chronological order

**1st Year Degree**

**WHAT**
1. Consider summer placements. Identify University placement co-ordinator.
2. Prepare CV

**WHEN**
Apply: 1st quarter of year directly preceding summer placement
Occurs: Summer of 1st year onwards

**HINT**
CV’s need covering letters. Keep them to the point explaining how you meet the requirements and why you want the role

**TIP**
Start your CV with your personal details (name, address, postcode, phone numbers, email) & a personal profile

**2nd Year Degree**

**WHAT**
Apply for summer placement

**WHEN**
Apply: 1st quarter of year of summer placement
Occurs: June-September

**HINT**
All companies, industrial or otherwise, want to recruit well rounded Pharmacists

**TIP**
Experience as many different types of pharmacy work as possible – don’t restrict yourself to the same sector each year because it’s the easy option or because you are focused on one career path. Your career may change in the future
3rd Year Degree

**WHAT**
1. Submit application for industrial placement or pre-registration places
2. Always have a ‘Plan B’ or alternative to your preferred industrial placement or pre-registration
3. Consider where you want to do your pre-registration and why you want to do it

**WHEN**
Submission of applications, interviews and outcomes occur April-September of year preceding pre-registration placement

**HINT**
1. Do not exceed 1 page for a covering letter
2. Update your CV periodically, e.g. every 6 months. List all relevant skills, work experience and responsibilities in CV

**TIP**
1. Do not exceed 2 pages in length for a CV

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Final/4th Year Degree

**WHAT**
1. Concentrate on exams
2. Keep placement/pre-registration tutors informed of any issues

**WHEN**
Throughout final year

**HINT**
Take time out for yourself after finishing final exams – it’s been a stressful few weeks!

**TIP**
Never forget to acknowledge those that have supported you through all the years of study completed (and all those who will support you in your future) — thank you goes a long way! e.g. Personal Tutor. Other examples may be those people that have helped you with your final year project

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Pre reg/Placement year to PhD

**WHAT**
1. Look out for PhD vacancies
2. Research PhD subject (and supervisors!)
3. Apply for PhD and prepare for interview
4. Identify career opportunities for direct entry into industry

**WHEN**
Apply: When vacancies advertised during pre-registration year
Occurs: Different dates of year post pre-registration

**HINT**
1. Do not exceed 1 page for a covering letter
2. Update your CV periodically, e.g. every 6 months. List all relevant skills, work experience and responsibilities in CV

**TIP**
1. Do not exceed 2 pages in length for a CV
2. Be really interested in the topic – 3 years will be very hard going if you have little or no interest in the subject

**TWO COMMON MYTHS**
1. I need a PhD to work in the Pharmaceutical industry
2. If I’ve worked in another sector of Pharmacy or never worked in the pharmaceutical industry, I cannot change career and work in the industry

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Pre-registration Pharmacist and Summer Placement FAQ’s
Summer Placements

Q. Do pharmaceutical companies offer summer placements? If so, which ones?
A. From this brochure the following pre-registration training providers offer summer placements. (AstraZeneca, GSK and MSD).

Q. How and when do I apply for a summer placement?
A. For the pharmaceutical companies listed in this brochure all open vacancies are advertised online at:

- GSK, www.gsk.com/careers
- AstraZeneca, www.careers.astrazeneca.co.uk
- MSD, www.msd-uk.co.uk/careers/home.html

GSK - You can apply for this by sending your CV and cover letter online to pharm.sci.connect@gsk.com, and entering SUMMER EXPERIENCE with the year in the subject box.

AstraZeneca - Follow the links for ‘students and graduates’ from the careers website. Applications are made by filling in the online application form located on the website which is live from Mid-November to Mid-January.

MSD - Apply from September through December for placements the following summer. Application is by CV and covering letter to hoddesdonrecruit@merck.com quoting reference FS/SP.

For other companies not listed in this brochure you should visit the company’s website.

Pre-registration Pharmacist Placements

Q. Which pharmaceutical companies offer pre-registration pharmacist placements?
A. GSK, AstraZeneca, Bristol-Myers Squibb, MSD and Pfizer all offer pre-registration pharmacist placements.

Q. How many vacancies do you have?
A. Currently, each year GSK has 8 vacancies, AstraZeneca has 2 vacancies, Bristol-Myers Squibb has 2 vacancies, MSD has 2 vacancies and Pfizer has 1 vacancy.

Q. Do I need an expected 1st class degree to apply for a pre-registration programme?
A. We would normally expect that applicants have a predicted 1st class or 2.1 degree.

Q. I am aware that some pharmaceutical companies only fund the six month Industrial part of the placement. Do I have to arrange the 6 month hospital part of the placement?
A. No, when you apply to a pharmaceutical company for a pre-registration position, the pharmaceutical company will arrange both parts of the placement.

Q. Who do I apply to for the pre-registration training programme?
A. All open vacancies are advertised online at:

- GSK, www.gsk.com/careers
- AstraZeneca, www.careers.astrazeneca.co.uk
- Bristol-Myers Squibb, www.bmscareers.co.uk
- MSD, www.msd-uk.co.uk/careers/home.html
- Pfizer, www.pfizercareers.com

Q. When can I apply for a pre-registration position?
A. As soon as the vacancy appears on the website of the company in which you are interested in undertaking a placement with.

Pre-registration opportunities are generally advertised within the period April through to August depending on which company you wish to apply to. You should apply during the year prior to the start of your pre-registration placement.

Q. Do you offer pre-registration placements to students who have not done a summer placement?
A. Bristol-Myers Squibb, GSK, MSD and Pfizer do not require you to have completed a summer placement to be eligible for a pre-registration placement whereas AstraZeneca normally recruit pre-registration pharmacists from those who have completed a summer placement with the company.

Q. Do I have to apply online?
A. Yes, we request that all applications for all vacancies are made online.

Q. Which part of the placement do I complete first?
A. At GSK we will normally aim to complete the hospital part of your training during the first 6 month placement. However, we reserve the right to place you in the Industry Placement first if circumstances dictate. At AstraZeneca, Bristol-Myers Squibb and MSD, half of the students will start their pre-registration year in industry and the other half at the non-industry placement. After 6 months the students will switch places and complete the second half of their training at the other speciality. At Pfizer we will aim to complete the industry part of your training during the first 6 month placement.

Q. When will I know the result of my application? What is your recruitment process?
A. For GSK, AstraZeneca and Pfizer you can track the progress of your application online at the website of the pharmaceutical company to which you have applied.

In general, pre-registration placements are advertised from April through to August, interviews are conducted in September and candidates are informed of the outcome by the end
Successful candidates will commence their placement in July of the following year.

Q. I am concerned that I will be at a disadvantage to other pre-registration students who have had 12 months clinical experience when taking the pre-registration exam? Are my concerns justified?
A. No. During the industrial placement, your tutor will provide training and guidance that will prepare you for the exam and beyond, and you will have access to extensive clinical references should you require them. During your non-industrial placement, you will cover all aspects of the GPhC pre-registration syllabus, undertaking the same training programme as those students placed for 12 months, but compressed into 6 months. Additionally, you will attend the study days with pre-registration trainees from the hospitals throughout the 12 month period.

Q. What will I do during my pre-registration year?
A. With regards to industry, your work will include:
- Completing the Performance Standards Programme as laid down in your pre-registration folder.
- Working within a team on an actual project.
- Completing a project.
- Attending study days with other hospital pre-registration students throughout the region.
- Visiting other departments throughout the company, e.g. regulatory, manufacturing, clinical supply operations.
- Gain experience of interacting with a wide range of health care professionals and scientists.

General Pharmaceutical Council
Q. How do I notify the GPhC about my pre-registration training?
A. By completing the online form in the “Entering Training Section” at www.pharmacyregulation.org

Post Pre-registration Pharmacist Placement
Q. Am I guaranteed a job in the pharmaceutical industry after the industrial placement or pre-registration period?
A. No, we are unable to make such guarantees but you may apply for any suitable positions that may arise at the time.

Q. If I do not do a pre-registration placement or industrial placement in industry, will I be able to apply to the Pharmaceutical industry at a later date?
A. Yes, you do not have to have completed an industrial placement or a pre-registration placement to work in the Pharmaceutical Industry.

Q. To proceed in the pharmaceutical industry would I be required to do a PhD after my degree or after pre-registration?
A. No, it is not necessary to have a PhD to have a successful career in the Pharmaceutical Industry. Some pharmacists in industry have chosen this career path, but there are also many pharmacists that have joined as graduates.

Q. Where can I find more information about careers in the Pharmaceutical Industry?
A. Pharmaceutical companies’ websites.
- Industrial Pharmacists web page of the GPhC www.pharmacyregulation.org
- Association of the British Pharmaceutical Industry (ABPI) website www.abpi.org.uk
- Royal Pharmaceutical Society (and Student Group) website www.rpharms.com
- Or at the following annual conferences:
  - Academy of Pharmaceutical Sciences Pharm Sci UK
  - Industrial Insights
  - The British Pharmaceutical Students Association
Opportunities for Pharmacists in the Pharmaceutical Industry

Achieving your potential

The Pharmaceutical Industry is fully committed to individual career development, and operates a formal process to help you progress towards your own personal career goals. Through a Personal Development Plan, you will define your performance objectives alongside business priorities. This provides a consistent approach to development planning that will enhance your achievements in your current role, and prepare you for further career moves.

To help you achieve your full potential, you will be encouraged to expand your technical knowledge through a combination of courses, conferences and on the job experience. This will be supplemented with coaching and mentoring schemes, project work and secondments.

Training is available in other areas such as time management, presentation skills, IT, project management and leadership. You may also enjoy a number of exciting opportunities to pass on your knowledge to future generations of scientists through a variety of programmes with local schools, colleges and universities.

Pharmacists have taken up careers in the following roles within the Pharmaceutical Industry:

Formulation

Formulation or Pharmaceutical Scientists assist in the development of stable formulations in a range of dosage forms such as solid, inhaled, intravenous and liquid from early to late stage development.

Manufacturing

Manufacturing Scientists plan, schedule and budget for the production of clinical trial supplies and the commercial manufacture of a range of dosage forms including oral, inhaled and sterile injectable products. Technical Support Scientists provide specialist technical support to development and clinical manufacturing campaigns (e.g. protocols for analytical testing, process validation).

Study Coordination - set-up and support of packaging clinical trial material for worldwide distribution.

Clinical Trials

The Clinical Research Associate (CRA) and Clinical Trials Manager monitors clinical trials in accordance with Good Clinical Practice (ICH GCP) guidelines.

A CRA may work directly with the sponsor company of a clinical trial or for a Contract Research Organization (CRO). The CRA ensures compliance with the clinical trial protocol, checks study centre activities, makes on-site visits, reviews Case Report Forms (CRFs) and communicates with clinical research investigators. CROs also work on pharmacovigilance, give GMP and GCP advice; all roles a pharmacist can be involved in.

Regulatory

Regulatory Affairs professionals’ dual role is to interpret and communicate regulatory requirements to the product development team and to effectively transfer knowledge and scientific information about the product to regulatory agencies. They are involved in the creation of submission documents from early phase manufacturing and clinical trial submissions through to marketing applications to the regulatory agencies including the European Medicines Agency (EMA), Food and Drug Administration (FDA) or the UK Medicines and Healthcare Products Regulatory Agency (MHRA).

Regulatory Scientists support the global management of product labelling throughout the product life cycle including the development of core safety information and global datasheets.

Pharmaceutical Assessors work within the regulatory agencies conducting scientific evaluation of submissions from pharmaceutical companies in support of a marketing authorisation or clinical trial application.

Quality

Quality Assurance (QA) Specialists are involved in writing control procedures and the review of batch records for the release of material. They also undertake internal and external supplier audits to ensure that Good Practice (GxP) guidelines are implemented throughout the supply chain. The Qualified Person (QP) is responsible in EU law for documentation sign off and product release of each individual batch of commercial or clinical trial material. In many countries, only pharmacists can act as QPs. In the UK there are insufficient applications by pharmacists for the position of QP.
Market Access

Market Access is a relatively new role in the pharmaceutical industry. In the past decade, the environment for the pricing and reimbursement of new medicines has become increasingly challenging as more expensive biotech medicines come to market. Along with demonstrating the safety, efficacy and manufacturing quality of a medicine, the manufacturer must now also demonstrate the cost-effectiveness as a further requirement to secure market access. A role in market access is about presenting clinical and cost-effectiveness data to demonstrate to the payer (e.g. Department of Health/NHS) that the new medicine is worth reimbursing.

Wholesaling

Pharmaceutical wholesalers are required to appoint a Responsible Person (RP) who is responsible for the ordering, storage and supply of medicines in compliance with local legal regulations.

Sales & Marketing

Pharmaceutical companies actively promote their medicines to healthcare professionals and patients (if a Pharmacy Only or General Sales List product). The marketer develops brand and disease awareness campaigns in line with local legal requirements (e.g. Association of the British Pharmaceutical Industry (ABPI) Code of Practice). Pharmaceutical companies employ sales personnel (medical representatives) to promote their medicines to physicians and other healthcare professionals such as nurses and pharmacists.

Medical

The role of Medical Affairs is to understand and interpret the clinical and scientific background about a company’s medicines and to translate it into clinical reality for company colleagues, health technology assessors, budget holders, prescribers, other healthcare professionals and patients. Medical/Scientific Advisors play an important role as a peer-to-peer interface with key clinicians and conduct advisory boards to obtain clinical advice on the company’s medicines and insights on product strategy. They are involved in managing investigator sponsored clinical research proposals. They also interface with senior management and commercial colleagues to help to evolve commercial strategy, to approve advertising materials and to train sales representatives.

Medical Information (MI) professionals also provide proactive information services to company colleagues, typically providing expert support to medical, marketing, sales or NHS liaison staff. They are often responsible for checking advertising and promotional material against the ABPI Code of Practice for the Pharmaceutical Industry.

Medical Science Liaisons (MSLs) are the medical and scientific experts for a particular therapy area with responsibility for building collaborative relationships with opinion leaders. MSLs facilitate the exchange of unbiased scientific information between the medical community and the pharmaceutical company. All MSLs report to the medical department and have entirely non promotional roles. MSLs are usually Physicians, Pharmacists, PhD graduates or Healthcare Professionals and will often have relevant therapy area experience. Most MSLs will have had some previous industry experience but some individuals will move into the MSL role straight from academia or clinical practice but will usually have some existing therapy area experience to bring to the role.

In recent years, many companies have recruited MSLs with a background in frontline medicine, nursing or pharmacy as more complex biotech medicines come to market.

Pharmacovigilance

Patient safety is a fundamental principle for those working in the pharmaceutical industry. Companies must continuously evaluate the benefit/risk profile of medicines post securing a marketing authorisation (MA). Information on adverse events (possible side effects) must be recorded in global safety databases and investigated by clinical and pharmacovigilance teams. Regular safety updates Periodic Benefit Risk Evaluation Report (PBRER) for post clinical and Development Safety Update Reports (DSURs) for pre-clinical data must be submitted to the regulatory agencies.
The Interview
Candidates’ Handbook
If you have submitted an online application and meet the minimum requirements for the position, you may be selected to interview for that position.

This document is intended to assist you in your preparation for this event and provides guidance on how to review a job description, update your curriculum vitae (CV) -- also known as a résumé -- and prepare for an interview.

You may be asked to submit your CV in support of your application. Before you do this, it is advisable to review your CV and to tailor it to the pre-registration placement, wherever possible. (For guidance on how to update your CV, refer to “Updating Your CV” (Résumé)).

**Research the position**

Know the ins and outs of the job you are applying for and be sure that you are qualified for the role. Try to speak with someone working in the same role either in the company you are interviewing with or another pharmaceutical company. Use networks like LinkedIn to put you in contact with relevant people.

**Reviewing Key Responsibilities/Accountabilities**

Your first task is to review the key responsibilities/accountabilities for the job. Consider how this job fits into the overall organisational structure, and how it interfaces with other groups. Think about how you would do this job. Consider ideas you may have that you always wanted to put into action. Now may be your opportunity to realise these ideas!

Then evaluate how the job compares with your current job and identify what is the same and what is different. Decide how you are going to address any differences to reduce concern about your ability to do this job. Identify experiences from previous positions you have held on which you can draw. For example, if the position requires you to manage an international group and your current role is limited to managing employees located in a single country, you may be able to identify examples of when you worked internationally in a prior role that demonstrate you are capable of this particular responsibility.

You may also want to list your key professional achievements so that you can talk confidently about these, if asked. If appropriate, think about your role as the leader of a successful, achieving team and recognise your achievements - think about what you did to direct, inspire, make or enable this to happen.

If it would be helpful and you have time, identify other people with whom you could talk about this job to gain greater insights and more ideas to help you with your preparation.
Reviewing Key Capabilities and Experience

The key capabilities and experience listed in the job description are those required for the job. Review these to identify which of the capabilities and experience you possess. You will want to emphasise these matches during the interview by using examples of your work to illustrate that you possess these. Where you see gaps, consider how you will address these. Note that you will need to complete the same exercise with any additional competencies that may be provided with the job description.

Finally, you may want to list your questions about the job so that you can ask these of the interviewer.

Once you have reviewed the job description, you may choose to update your CV to emphasise your current and prior responsibilities and achievements to tailor these to job for which you are interviewing.

Updating your CV (Résumé)

A CV (or résumé) is a useful, easy-to-read summary of your education, qualifications, work history, competence and career achievements. Treat it as a marketing communication that is designed to convince the interviewer that you are a serious candidate worthy of being interviewed. You may wish to tailor your CV to the job for which you are applying, placing specific emphasis on areas that are relevant to the position.

While CVs come in many shapes and sizes depending on individual preferences, there are some commonly accepted elements regarding content and format that are recommended for inclusion. These are provided in the following two sections.

Content (In Order of Appearance)

- Your full name
- Your home address, telephone and fax numbers, and email address
- An objective statement tailored to the particular job for which you are applying (optional)
- Educational and professional qualifications
- Full work history, starting with most recent job, including all dates and explanations for any gaps
- Professional affiliations (e.g., American Chemical Society)
- One or two leisure interests (optional)
- Publications (use a consistent, “journal-acceptable” format)

For each job, include job title, key responsibilities (including for budget and people), and career achievements.

Format

- Easy-to-read, with information relevant to the job and which can be easily understood by the interviewer - be careful not to include too much on one page.
- Two pages maximum - most interviewers spend less than a minute reading each CV, searching for key information.
- Minimise underlining; stick to bold, italic, and capital letters for emphasis or headings and sub-headings. Before you apply online for a position, be sure you read any instruction on that site regarding formatting. Formatting a CV for the web is very different from formatting a CV to take to an interview.
- Spell-check and review the final version for errors.
A type of interviewing technique you may encounter is competency-based interviewing. This technique focuses on your behavioural and technical competencies — in other words, the knowledge, skills and abilities that you possess. Competency-based interviewing is based on the principle that past behaviour predicts future behaviour.

- You may be asked to relate past job-related experiences in the context of the specific capabilities or competencies that are required for the job. When you are relating these experiences, the interviewer is looking for a specific situation or task, the actions you took, and the results you obtained. Refer back to the job description to remind you of which capabilities (and competencies, as appropriate) are required for the job. You will be questioned about some or all of these. In order to prepare for this section of the interview, for each capability/competency: Identify two job-related STARs that occurred in the last two years that will demonstrate that you possess the capability/competency.

- Stay focused on you - say what you did, not what “John” or “we” did.

- Plan to take five to ten minutes to relate each situation, giving the highlights rather than every detail.

- Be sure to convey the actions you took in the light of the situation and clearly indicate the results of your actions.

- Practice, practice, practice - in front of the mirror, with your significant other or pet, or plan a mock interview with a friend or colleague.

In addition, be prepared to answer some questions about your educational background and work history, including your current role.

Final Preparations

Avoid making vague statements that may sound good but provide no specific information about what you did, such as “the project team created a plan...”

Avoid giving your opinions about a situation or task as these provide no information about what you did.

Avoid making theoretical statements such as, “I would do…”, or “I always…” as these provide no information about what you actually did.

In order to ensure you have made your final preparations, be sure you:

- Know who is going to interview you, and his or her position in the company.

- Know when and where the interview is being held, and how to get there.

- Know what you need to bring to the interview (a copy of your CV is recommended).
Day of the Interview

Physical and Mental Preparation

The day of the interview arrives at last! It is important to be physically and mentally prepared before you step through the door into the interview room. Here are some tips to help you create the optimum physical and mental state for your interview:

- Arrive ten minutes early
- Think positive thoughts - you are looking and feeling great!
- Take a couple of deeps breaths to help you relax

Introductions

- When you meet the interviewer, remember that first impressions are lasting impressions. Be positive and enthusiastic! This is the time to sell yourself!

Aim to:

- Relax, smile, and look poised and confident as you enter the room
- Shake hands firmly if the interviewer offers his or her hand, and introduce yourself
- Wait until the interviewer invites you to sit down
- Make eye contact - naturally
- Be yourself!

Key Background Review

When you have completed the introductions and the interviewer has explained the format for the interview, you may be asked specific questions about your educational background and work history, including your current role.

In the Interview, Aim to:

- Listen carefully to the question
- Take a few seconds to compose your thoughts before you answer
- Ask for clarification if you need to - be sure you really understand what the interviewer is asking
- Speak succinctly and clearly, minimise jargon, eliminate slang
- Watch the ‘landings’ - notice how your words impact the interviewer and his or her body language
- Try to vary your examples - though it is okay (and sometimes efficient) to use the same example to illustrate different competencies

Your Turn

Once the interviewer has satisfactorily elicited all the information he or she requires, you may be given an opportunity to ask your questions. Make a mental note during the interview of any additional questions that arise during the discussion. Be aware, however, that the interviewer may not have all the answers about the job.

In addition to asking your questions, you may wish to:

- Jot down key points you want to remember
- Ask what the next steps will be
- Confirm your enthusiasm for the job
- Thank the interviewer for his or her time

If the interviewer initiates some initial small talk about the weather, your journey or a topical issue, be responsive - this is part of the interview and the initial impression you make.
Scientific Conferences of Interest
Industrial Insights

Industrial Insights is organised by the Academy of Pharmaceutical Scientists and New Scientist Focus Group and aims to provide students with an insight into the Pharmaceutical Industry and possible career opportunities for Pharmacists or Pharmaceutical Scientists. The event for 2010 was held at AstraZeneca, Loughborough and will rotate annually to other pharmaceutical companies. Further information is available on the Academy of Pharmaceutical Sciences website, www.apsgb.org

Academy of Pharmaceutical Sciences (APS PharmSci) - The Science of Medicines

The conference showcases the best of pharmaceutical science from the UK and around the world bringing together academic and industrial institutions, providing state of the art technologies and a platform for the development of new pharmaceutical talent. The Academy works with related partner organisations including EUFEPS, JPAG, UKICRS, HealthTech and Medicines Knowledge Transfer Network, IPG, SkinForum and the RPharmS together with the Academy’s focus groups to deliver a high quality science programme.

In keeping with the Academy’s philosophy to promote interaction and collaboration between the multidisciplinary subjects which constitute the pharmaceutical sciences. At the new-style conference on “The Science of Medicines” you will hear presentations on the new findings from prestigious leaders and young science researchers and in various topics including biopharmaceutics, biologicals, materials science, pharmaceutical analysis, particle processing, natural products, quality by design, therapeutic biomolecules and vaccines, regenerative medicine and medicinal chemistry.

The conference organisers are keen to attract both undergraduate and postgraduate students by offering a programme that develops presentation skills and the scientific networks essential for future careers. There will also be opportunities to network and enhance knowledge for both academic and industrial attendees in a wide range of disciplines.

The conference will have extensive opportunities for submitted oral presentations and posters. Plenary presentations will include a Keynote address by the Conference Chairman.

The conference includes a large pharmaceutical sciences exhibition to highlight large pharma companies, small and medium size enterprises, contract research organisations and technology suppliers. SME’s also have the opportunity to present their technologies at a special showcase event. The exhibition, related conference sessions and social events will help delegates develop their personal and professional network to meet future needs.

Science into Practice Conference

The Science into Practice conference is an annual day event the BPSA runs in November/December and hopes to demonstrate how the scientific aspects of the MPharm course can be applied in your future careers.

The conference aims to give a variety of talks from many areas of the pharmacy profession that are alternative to the hospital and community career pathways such as academia, industry and clinical research in practice. In the past there has been speakers who have talked about integrating research into their day to day hospital pharmacy career, talks on orphan and specials medicines, tips on getting employment in industry and summer placements, clinical trials and much much more.

In the past there have also been opportunities to ask questions and learn useful hints and tips from an expert panel at a Q&A session at the conference consisting of experts in the field and students who have previously done a pre-registration/summer placement in industry.

This conference is a great opportunity for you to gain an insight into industry and the wide range of opportunities that await you in Pharmacy which you may not be aware of. You’ll also receive a PDS point for attending.
Useful Links

**Academy of Pharmaceutical Sciences**
www.apsgb.org

**Association of the British Pharmaceutical Industry**
www.careers.abpi.org.uk

**AstraZeneca**
http://www.astrazeneca.co.uk/careers/

**Bristol-Myers Squibb**
www.bms.com/careers

**British Pharmaceutical Students Association**
www.bpsa.co.uk

**European Industrial Pharmacist Group**
www.eipg.eu

**General Pharmaceutical Council**
www.pharmacyregulation.org

**GSK**
www.gsk.com

**MSD**
www.msd-uk.com/careers

**Pfizer**
www.pfizercareers.com

**Royal Pharmaceutical Society**
www.rpharms.com

**TOPRA (The Organisation for Professionals in Regulatory Affairs)**
www.topra.org

**UK & Ireland Controlled Release Society (UKICRS)**
www.ukicrs.org

**PIPA Pharmaceutical Information and Pharmacovigilance Association**
www.pipaonline.org