

Industrial Pharmacists Group

Career opportunities for pharmacists in the UK pharmaceutical industry

The pharmaceutical industry is one of the United Kingdom's major business success stories. Its research excellence is second only to the United States, with seven of the 25 top-selling medicines in the world having been discovered by British scientists. The industry contributes more than £2bn to the UK balance of trade. It provides direct employment for more than 60,000 people and, indirectly, something like three times that number of jobs in supply and associated industries. It offers many opportunities for pharmacists.

THE PHARMACEUTICAL "PROCESS"

The pharmaceutical industry is a body of many parts. But those parts work together and all have the same ultimate aim of providing patients with safe, efficacious medicines of high quality. The process of bringing a medicine to market is complicated and expensive — research and development of a new chemical entity takes 10 to 12 years, and can cost up to £500m.

Research "Research" is a broad designation covering a number of sub-categorisations, including synthetic chemical research, toxicology and clinical trials.

Synthetic chemical research is largely carried out by PhD chemists. Similarly, the toxicology aspects of research are carried out by specialist toxicologists, although there may be some openings for pharmacists who have specialised in pharmaceutical chemistry or toxicology.

Clinical trials allow the manufacturer to test the efficacy and safety in patients. This aspect of research is one area where the pharmacist's skills are particularly appropriate and they equip him or her admirably to carry out the duties of the clinical research associate. The position of clinical trials dispensary manager is particularly suited to a pharmacist who has had experience of managing a busy dispensary.

Development When a medicine has been discovered and tested for safety, it has to be developed into a dosage form that delivers the active ingredient effectively. A pharmacy degree provides the ideal background for this, and many heads of development units within the industry are pharmacists.

Regulatory affairs You may have the best medicine in the world but, unless you can ensure the prompt provision of well-presented information to the licensing

authorities to support the registration of the product, you may lose valuable marketing time for your new product or, in the worst case scenario, not even have it registered. Again, the pharmacist's broadly based education puts him or her in a good position to provide this kind of service.

Pharmaceutical analysis At all stages throughout the research, development and manufacture of a medicinal product, reliable analysis of products and ingredients is necessary. Again, the pharmacist is well qualified to carry out such activities (indeed, I began my career in this role).

Manufacture The manufacture of medicinal products is governed by the precepts of good pharmaceutical manufacturing practice. The pharmacist is as well qualified as any other discipline to be involved in this. A pharmacy degree is also excellent grounding for the requirement to be a Qualified Person, who releases product to the market.

Marketing Having development and manufactured the product, a marketing strategy has to be developed. Many pharmacists have found their niche in this activity. Those who enter the industry from community or hospital pharmacy can bring their knowledge of patients to this role.

Sales A major activity of the industry is the sale of its products to health professionals. Pharmacists are uniquely qualified to talk to health professionals because, with the exception of doctors, they are probably the only people in the company with experience of dealing directly with patients.

CAREER STRUCTURE

It is difficult to specify a strict career structure pattern within the pharmaceutical industry. One of the most exciting aspects of the industry is the wide variety of options it provides for changes in career direction. It is unusual for anyone to stay in the same area of activity throughout their career. For example, the development pharmacist may metamorphose into a clinical research associate and from there move on to sales or regulatory affairs. All that can be said is there are numerous opportunities for an interesting and fulfilling career.

REMUNERATION

While this brief review does not cover remuneration for pharmacists in industry,

the Industrial Pharmacists Group does from time to time conduct and publish a survey into salaries of industrial pharmacists. The last one was conducted in 2000 (*PJ*, 6 January 2001, p9).

However, as a generality, it has to be borne in mind that while initial salaries for pharmacy graduates may not match those of other sectors of the profession, particularly community pharmacy, other benefits such as travel, variety of work and career enhancement opportunities can offset this and in the long term offer a varied and rewarding career.

DEMAND FOR PHARMACISTS

At present, it is estimated there are about 2,000 pharmacists in the UK pharmaceutical industry, ie, about 5 five per cent of the register. This percentage has remained roughly constant over a number of years, and there are no signs that it is likely to change significantly.

PREREGISTRATION OPPORTUNITIES

The current provisions of the Society relating to preregistration experience allow for some of it to be gained in the industrial setting. A few companies run schemes with National Health Service partners to facilitate a split preregistration year.

However, lack of industrial experience during the preregistration year is not necessarily a barrier to entry to the industry. Indeed, as mentioned above, companies value the experience of patient contact that pharmacists have and can bring to bear on their industrial career.

SUMMARY

This outline shows that the pharmaceutical industry provides the opportunity for a pharmacy graduate to follow a career with a variety of paths in the research, development, manufacture and sale of medicinal products. However, pharmacists should recognise that many other disciplines are also suitably qualified for the functions described above, and therefore the competition for selection may be intense. A degree in pharmacy does not confer preferential treatment in the selection procedure — it merely puts you in the frame!

n Contributed by Mike Murray, MRPharmS, technical and environmental affairs executive, Association of the British Pharmaceutical Industry