## References

BAHLE, Y.S., STRAUGHAN, D.W. & WEBSTER, R.A. (1974). Second report on the organization of pharmacology in Great Briatin. Br. J. Pharmac., 50, 163-175.

BURFORD, H.J. & STRITTER, F.T. (1974). Evaluation of a teaching program in medical pharmacology, J. Med. Educ., 49, 236-244.

COOPER, B. & FOY, J.M. (1967). Students' attitudes to

learning from programs, lectures and textbooks. Amer. J. Pharm. Educ., 31, 461-466.

FOY, J.M., HICKS, R., LEACH, G.D.H. & SENIOR, J. (1972). The teaching of applied pharmacology. Pharm. J., 209, 16-18.

FOY, J.M. & SENIOR, J. (1974). Do 'A' levels really matter? Pharm. J., 213, 379-381.

MILLER, G.E. (1967). Educational science and education for medicine. Brit. J. Med. Educ., 1, 156-159.

## Career patterns in science graduate pharmacologists

## P.B. MARSHALL & I.H. STEVENSON

Department of Pharmacology and Therapeutics, University of Dundee

To meet the increasing demand for pharmacologists in both universities and the pharmaceutical industry, several universities have over the past 25 years established science-based degrees in pharmacology.

majority of graduates within the upper and lower second class groups.

As is evident from Table 1, 67 of the ordinary B.Sc. graduates were untraced and of the remainder just under half proceeded to honours pharmacology. Thirteen students went directly at this stage into the pharmaceutical industry. Of our 53 honours graduates, approximately half proceeded to further post-graduate study, the other major careers undertaken being medicine and the pharmaceutical industry. Of the 25 students who had taken postgraduate degrees, 15 went into university posts either

Table 1 Career patterns in science graduate pharmacologists

	Ordinary B.Sc.	Honours B.Sc.	M.Sc./Ph.d.
No. of students	181	53	25
After graduation			
Honours B.Sc. (other subjects)	17		
M.Sc./Ph.D.	2	26	
Medicine/Dentistry	3	5	1
University teaching/research	0	2	15
School teaching	8	1	_
Pharmaceutical/chemical industry	13	8	8
Laboratory-based occupations	8	4	
Librarianship	_	2	
Non science-based occupations	10	5	_
Retiral thro' marriage	_		1
Untraced	67	_	_

The B.Sc. Pharmacology Course in Dundee was one of the first to be established, the first student graduating from the Honours Course in 1954. This paper surveys the career patterns of the 197 students who have graduated from this department between 1954 and 1975. Of these, 181 and 53 completed the ordinary and honours B.Sc. courses respectively and 25 students have taken post-graduate degrees in this department (Table 1). All of the honours graduates had previously taken the ordinary B.Sc. course and, of the 25 post-graduates, 9 were recruited from our own honours graduates. The pattern of honours grades awarded showed an even distribution, with the

in teaching or in research and 8 joined the pharmaceutical industry.

In summary, of a total of 133 students followed up (117 Dundee undergraduates plus 16 post-graduates from elsewhere), 64 have entered occupations in which Pharmacology is predominant, 46 have entered careers with a general scientific basis and 20 are known to have entered other occupations, with no scientific basis.

The authors are grateful to the University of Dundee Careers and Appointments Service for information on careers taken up by ordinary B.Sc. graduates.