biopsy. The main advantage is the speed and accuracy of needle operation when the specimen is taken.

Although both the machine and manual needles are of similar gauge and notch size—14 gauge and 200 mm respectively—generally a larger piece of tissue is obtained with the automated system. For example, one core was taken from the same kidney with each technique: the diameters were 1.15 and 1.00 mm for the automated and manual systems respectively. Using the device with a smaller gauge needle, serial multiple specimens can be taken in the transplanted kidney, making this an alternative to fine needle aspiration for the investigation of suspected rejection. The use of the gun in transplanted kidneys is well reported.²

The gun can be used singlehandedly, allowing ultrasonic imaging to be carried out by one operator. The only disadvantage is that it is a more expensive technique as the modified needle for the gun costs more. The gun can be sterilised for use in the operating room, but the needles are not reusable.

This is a major improvement on manual percutaneous renal biopsy, and the technique should be more widely known.

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Health of long term benzodiazepine users

SIR,—In France, as in Britain, benzodiazepines are the most commonly prescribed psychotropic drugs, accounting for a third of all those prescribed.

In January 1984 we carried out a study in which all patients admitted to an internal medicine unit were asked about benzodiazepine use during the previous year.¹ Alcohol, tobacco, and concurrent drug consumption and past illnesses and operations were also recorded. There were 129 patients, and 49 were identified as benzodiazepine users; the remaining 80 had not used benzodiazepines in 1983. Twenty four of the users were long term users (daily intake of at least one benzodiazepine for over four months) and 25 intermittent users (less than four months' use). Seventeen of the long term users had taken the drugs for over a year.

Users and non-users did not differ in sex ratio, and tobacco and alcohol consumption was similar in non-users, long term users, and intermittent users. The long term users were predominantly elderly. The users had had substantially more

medical conditions and surgical procedures than the non-users, and there was a strong association between use of benzodiazepines and concurrent drug use (table). Cardiovascular and musculoskeletal disorders were the most common diseases in the users. Among the long term users the drugs had been prescribed for insomnia (6) or anxiety (6), or both (12). Generalists had more often prescribed them than psychiatrists, though psychiatric morbidity had been found in 11 patients. Seven patients had a diagnosis of depression.

Our data agree with those of Dr E K Rodrigo and others (27 February, p 603), although the prevalence of long term use was lower in their study (2.2%) and in that of Dr Kevin Morgan and others (p 601) (11.2%) than in ours (18.6%). This difference might be due to the fact that we studied inpatients, who have a higher rate of chronic diseases than outpatients. Nevertheless, like Dr Rodrigo and others, we found a strong association between benzodiazepine use and concurrent psychotropic and non-psychotropic drug use, and in both studies cardiovascular and rheumatological diseases were the most commonly associated illnesses. Our long term users had had more surgical procedures, however, and this was the only difference between our long term and our intermittent users.

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A better deal for senior house officers

SIR,—As vocational training scheme course organisers we wholeheartedly agree with the leading article by Stella Lowry (27 February, p 590). Since the inception of the Derby scheme in 1973 a half day release course has operated for all trainees in hospital posts and in general practice for about 30 weeks each year, and there have always been problems of trainees in some hospital posts being released to attend these meetings. We do not expect 100% attendance but would suggest that 60-70% should be possible. In practice, however, some senior house officers manage only 10-20% of sessions. When we question why this is so we are told that service commitment or staff shortages have prevented their attendance. This problem has not lessened with the large increase in hospital staffing or with personal approaches to the consultants concerned, despite them all agreeing

in principle to allow their senior house officers to attend. If we press the argument home on educational grounds we are often met with the answer that the post can always be withdrawn from the scheme.

To introduce educational aims and set sessions for all senior house officers is of paramount importance but will come about only through the colleges asking to see the educational plans that consultants have constructed for their senior house officers on visits to reapprove posts for training purposes, asking the doctors concerned whether tutorial time is made available, and, more importantly, encouraging consultants to attend courses on learning and teaching.

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Medical researchers in general practice

SIR,—Dr Richard Smith's excellent article *Medical researchers training and training* (26 March, p 920) has prompted me to write about the position of general practice research.

About 40% of all doctors in Britain are general practitioners and nearly all the people of Britain have a family doctor. About 96% of consultations are dealt with completely by the general practitioner, and only 4% are referred for a specialist's opinion. A very wide range of clinical medicine is seen by the general practitioner, giving considerable opportunity for research. The academic standards of new entrants to general practice are higher than ever. More high flyers are coming into general practice out of choice, and there is now no shortage of doctors who would be potentially good research workers.

The best way of learning research skills is to do research with the advice and help of experienced colleagues. General practice is now represented in every medical school in the country, in 16 with professorial departments, where research can be carried out in professional surroundings, with the facilities of a library, computing, and statistics. Research is carried out by the academic staff as well as research fellows and often funded by outside bodies. The Royal College of General Practitioners is at present offering research fellowships to allow a general practitioner to carry out research in this way. Most research, however, is carried out in the doctor's own practice, where he would also have a full clinical commitment. It is reasonable that a good study should be supported financially so that, in addition to paying the running expenses of a study, money should be made available to buy some of the doctors' time, so that partners are not penalised for the necessary absences of their researching partner.

One of the best ways of learning research methods in general practice, without being attached to an academic department, is to write an MD thesis. It is difficult to accept this challenge and at the same time have a clinical commitment but it can be done provided the doctor has the will and determination to do it.

In two studies of MD theses from British medical schools in 1958-72 an average of just over 3% were from general practice.^{1,2} The reasons given by the general practitioners for writing a thesis seemed to be more to do with the challenge to their intellectual ability than for any personal gain; 86% of the doctors in the two studies had carried on doing research afterwards.

Good thinkers, especially if they are determined and dedicated, are rare, and they should be en-

Characteristics of the three groups of patients

	Total (n=129)	Long term users (n=24) (1)	Intermittent users (n=25) (2)	Non-users (n=80) (3)	p Value	
					1 + 2 v 3	1 v 3
Cardiovascular and rheumatological diseases:						
Present	89	19	20	50	<0.05	NS
Absent	40	5	5	30		
Past operations:						
<2	93	14	11	68	<0.001	<0.005
≥2	36	10	14	12		
Associated drugs:						
<3	98	12	18	68	<0.001	<0.001
≥3	31	12	7	12		
Other psychotropic drugs:						
Yes	21	9	5	7	<0.005	<0.001
No	108	15	20	73		