Association of Dermatologists last July, I pointed out that of 51 registrars in training, 18 are women, and of 44 senior registrars, 9 are women.

The problems the part-time married women face are still immense. In England and Wales it is possible for them to obtain manpower approval for training on a personal basis, but such applications are considered only once a year. If this is obtained, they then have to find a post in a hospital near to their place of residence, this post has to be approved as suitable for training by the Joint Committee on Higher Medical Training (JCHMT), and the funding of this post is by no means mandatory but is subject to the whim of the relevant health authority. If the woman is fortunate enough to obtain such a post and her husband (often also a hospital doctor in training) moves to another region, the whole performance starts again.

The JCHMT have not yet given definite guidance on the numbers of weekly sessions they require and the numbers of years these women have to spend in training before they can be considered for specialist accreditation.

If they successfully negotiate these hurdles, they then have to find a part-time consultant post which is reasonably near to their place of residence. At present it is very difficult to establish new consultant posts even in those regions where the work load is excessive. Without a new approach to this ever increasing problem the outlook for many of these bright young women is bleak, and their skills will be lost to medicine.

If it is impossible to find a solution to this situation, it may be necessary to apply a quota on the numbers of women admitted to medical schools. I am sure that such a suggestion would cause a massive uproar.

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A better system for polio vaccination in developing countries?

SIR,—Professor T Jacob John and others (23 August, p 542) suggest that vaccination of groups of children with live polio vaccine leads to higher seroconversion rates if vaccinations are carried out over a short period of time ("pulse") than if vaccinations are spread over a longer period of time. They may be correct, but their argument that "pulse" vaccination leads to greater interperson transfer of vaccine virus is unconvincing.

The authors compare results of two polio-vaccine trials, one in which vaccines were given over a period of time to children of several communities and another in which vaccine was given simultaneously to children in a single community. Unfortunately the two trials used different vaccines, the target children were of different ages (6-51 weeks in trial 1, 3 months-5 years in trial 2), and the trials were carried out several years apart and in different communities. Given so many differences between the two trials, any comparison between their results should be made with great caution. In particular, it does not seem justified to focus upon the different schedules of the trials alone.

On the other hand, the authors may have made a useful point even if for the wrong reasons. It is not unlikely that intensive vaccination campaigns do give better seroconversion rates than do routine programmes. Among the major reasons for this is the greater quality control of vaccines and of vaccine administration which is possible in intensive special campaigns in contrast to the situation when vaccination is left to routine child health services.

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Hormone receptors and human breast cancer

SIR,—The recent leading article on hormone receptors and human breast cancer (13 September, p 694) was both succinct and up to date, but was also surprisingly deficient in its references to the postulated effects of hormones on the so-called hormone-related cancers.

Although the association between endocrine function and immunity has only recently been recognised, a gross effect of hormones on lymphoid tissue has in fact been documented in experimental animals for at least 75 years.[1] With the development of more sophisticated techniques this and other findings[2-4] have been shown to be crude indications of more subtle immunological changes.[5-7] From the latter investigations in particular it was concluded that hormonal manipulation can profoundly influence cell-mediated immunity. As a direct effect of these animal studies a prospective study was carried out in patients with advanced breast cancer receiving hormone treatment, the results of which showed a high degree of correlation with the earlier animal findings.[8 9]

In the hormonal treatment of cancer there is now mounting evidence for concurrent mechanisms governing the process of tumour regression, which undoubtedly should be considered in any analysis. Nevertheless, some observers continue to ignore such data and attribute positive responses solely to the genetic "hormonal responsiveness" of a particular tumour. Since regression is a highly complex phenomenon, it would seem reasonable that this will involve multiple biological mechanisms and is unlikely to be due to one factor in isolation of others.

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Tapping ascites

SIR,—I would like to comment on the articles "Tapping of Ascites" by Drs E Ryan and G Neale (16 August, p 499, and 23 August, p 550). Although the medical aspects of paracentesis were thoroughly covered, the section on tapping the acute abdomen contained some points with which I disagree.

The authors suggest that four-quadrant tap should precede peritoneal lavage with cases of abdominal trauma. The evidence, however, is in favour of lavage from the outset. It has been shown with paracentesis alone that a positive tap is only obtained with 200 ml of intraperitoneal blood 20% of the time and with 500 ml only 80%.[2] Also in a study comparing paracentesis with lavage in 267 patients, it was found that 79% of those who had negative taps but positive lavage had significant intraperitoneal injury at subsequent laparotomy.[2] The major objection to simple paracentesis is the high percentage of false-negative results. Conversely, lavage is too sensitive and gives false-positive results. An important technical point is that local anaesthesia must be used, with lignocaine and adrenaline. This permits careful haemostasis at the subumbilical entry point and avoids blood tracking into the peritoneal cavity from the wound, thereby reducing the false-positive rate.

Finally, it is essential that the bladder be empty. Simply requesting these patients to pass urine is inadequate, as they may be unconscious, under the influence of alcohol, or in pain. The safest course is probably catheterisation, provided there are no signs of urethral injury.

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Hyperlipidaemia advances and retreats

SIR,—What does Professor C R Klimt (13 September, p 744) mean by "modest benefits that were not statistically significant?" If the benefits are not statistically significant, do they exist at all?

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Treatment of severe hypertension using chlorpromazine

SIR,—Dr Robert J Young and others (28 June, p 1579) have used chlorpromazine (50 mg intramuscularly) together with frusemide (50 mg intravenously) in treatment of nine patients with severe hypertension (BP $\geqslant$210/130 mm Hg supine after one hour's bed rest) and reported a good blood pressure reduction in hourly measurements without side effects. The authors write that these drugs in combination reduce severely raised blood pressure satisfactorily and safely and that this has not been recorded before.

Firstly, we want to point out that chlorpromazine has been used for several years in the Scandinavian countries in treatment of these patients, often given as small intravenous bolus injections. Recently we have shown in a Danish multicentre trial that chlorpromazine was quite as effective as diazoxide and dihydrallazine. Secondly, we want to point out, that the dose of chlorpromazine used by Dr Young and others (50 mg intravenously) is quite high. Our experience is that even 25 mg chlorpromazine intravenously might in some patients induce severe hypotension. In our study we gave only chlorpromazine intravenously, initially 2·5 mg followed by 5-10 mg every quarter of an hour until good blood pressure reduction was achieved (diastolic BP$\leqslant$110 mm Hg). A few patients developed transient hypotension after even very small doses. Ledingham and Rajagopalan[1] have described patients who after being given large