beef insulin, but there is no correlation whatsoever to the mode of insulin delivery.

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Later on these data may well be of interest to others. In studies of long and medium term changes it would be very useful to be able to see the original data of previous workers.

Most large-scale research nowadays involves data in a computer-readable form which can be readily stored on magnetic tape. These data should not be allowed to rest at the bottom of the researcher's drawer, but should be made available to others by a central agency for data collection. The obvious body to create such an archive for medical data would be the Medical Research Council, preferably in conjunction with the S.S.R.C.'s own unit.

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GLOMERULAR CRESSENT CELLS
SIR,—Dr Atkins and his colleagues (April 17, p. 830), reporting on human glomeruli cultures, noted three types of cells in the outgrowths—type 1, morphologically resembling epithelial cells; type II, resembling mesangial cells; and type III, phagocytic cells resembling macrophages. In outgrowths from glomeruli of controls and from patients with non-crescentic glomerulonephritis, cells of types I and II were predominant and type-III cells were rare. In contrast, glomeruli from patients with rapidly progressive (crescentic) glomerulonephritis showed large numbers of type-III cells while type I was rare. Atkins et al. interpreted these results as meaning that crescents are formed mainly by an accumulation of macrophages. This is in contrast to the more commonly held view that crescents arise by proliferation of epithelial cells (visceral, parietal, or both).

The presence of macrophage-like phagocytic cells has been observed by electron microscopy in crescentic glomerulonephritis1-3 together with other structural forms of crescent cells (epithelioid-like, fibroblast-like, and intermediate forms). The origin of these cells, however, deserves comment. Atkins et al. hold that the crescent is formed by an accumulation of circulating macrophages which later may transform into other types of crescent cells. The participation of extraglomerular cells in crescent formation has previously been suggested1-3 but the presence of actively phagocytic, mobile cells in the outgrowths from crescents is not in conflict with the traditional view that the crescents are formed mainly by proliferation of epithelial cells. Epithelial cells from normal as well as nephrotic kidneys have phagocytic abilities both in vivo4,5 and in vitro.6 These potentials might be stimulated by some pathogenetic factor active in crescent glomerulonephritis and cause the proliferating epithelial cells to assume a macrophage-like structure and function. Further changes might also be induced in vitro. It seems probable that such changes take place in view of the large proportion of macrophages in the tissue culture as compared to the more heterogeneous cellular composition of crescents seen by electron microscopy in renal biopsies.2

The results of Atkins et al. clearly demonstrate the presence of a special phagocytic cell type in crescentic glomerulonephritis incubated in vitro, but its origin is not unequivocally established. In our opinion the classical theory about the epithelial origin of glomerular crescents has still neither been proven nor disproven.

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ARCHIVE FOR RESEARCH DATA
SIR,—Dr J. K. Cruickshank and I have described some results of a detailed questionnaire survey of medical students at the University of Birmingham.2 Within a few weeks of publication we received a letter from the Social Science Research Council Survey Archive, at the University of Essex, a body of which I had previously been unaware, asking if we would be willing to deposit a copy of our machine-readable data at the archive. The purpose of this deposition would be to allow secondary analysis of our data by any interested researchers at any time in the future. We readily agreed to this request.

Data from any form of research, especially large questionnaire and population surveys, are acquired at the expense of a large amount of time, effort, and money. Very often far more data are collected than can be analysed by the research team. Later on these data may well be of interest to others. In studies