EDITORIAL.

Scope of the Journal.—For the publication of original communications concerning the causes, distribution, symptoms, pathology and treatment of malignant diseases and allied conditions. Papers upon clinical, bacteriological, biochemical, pharmacological, physiological, radiological, serological, and other subjects therefore would be acceptable when related to this subject.

Forwarding Papers and Correspondence.—Papers should be forwarded to Professor R. W. Scarff, The Middlesex Hospital, London, W.1.

Subscriptions and business correspondence are received by the publishers, Messrs. H. K. Lewis & Co. Ltd., 136, Gower Street, W.C.1.

Date of Publication.—The Journal is published quarterly in March, June, September and December.

Rapidity of Publication.—All papers accepted for publication will be printed, so far as is possible, in the next following issue of the Journal, if received before the first day of the month preceding publication. Long papers, or papers with illustrations, may, however be delayed if not received earlier.

Reprints.—25 reprints will be supplied free to authors who are registered as personal subscribers to the Journal. Additional copies must be ordered from the Publishers before the issue is printed. Prices on application.
SURVEY OF PAPERS

Nash finds no evidence to confirm the hypothesis that domestic factors or habits common to husband and wife are carcinogenic (p. 577).

Phillips finds that lung cancer has increased approximately eight times among males and doubled among females in Canada between 1931 and 1956, during which time the death rates for tuberculosis and other respiratory diseases have significantly declined. He shows that a substantial proportion of the recorded increase in lung cancer can be accounted for theoretically by a diagnostic error of 5 per cent (p. 589).

Muir gives an account of gastro-intestinal malignant neoplasms in Singapore based on a series of 304 such growths examined post-mortem (p. 595).

Winkelstein, Lilienfeld, Pickren and Lilienfeld find no radiological evidence that atherosclerosis of the aorta is less frequent among cancer patients than among controls (p. 606).

Salm gives an account of a case of osteogenic sarcoma of the soft tissues of the loin and discusses the histogenesis of this type of growth (p. 614).

Kreyberg draws attention to the contrast between the enormous amounts of 3:4-benzpyrene in the air from gasworks, and the very moderate excess of lung cancer in the workers employed there. He suggests that in studies of possible carcinogens in the air inhaled by the human population particle size should be recorded in addition to the amounts present (p. 618).

Roe, Salaman and Cohen have observed a strong tumour-promoting effect by a phenolic fraction of cigarette smoke condensate applied to the skin of mice after a single tumour-initiating dose of DMBA. They discuss the implications of their findings and their relevance to the induction of bronchial carcinoma in man (p. 623).

Baló, Kendrey, Juráš and Besznyák report the favourable effect of treatment with DBM on a series of transplantable rat and mouse tumours, and describe the toxic effects on the blood picture, bone marrow and parenchymatous organs (p. 634).

Siller describes a spontaneous osteogenic sarcoma which arose in the right tibia of a seven-year-old female fowl and metastasised to the lungs and right kidney (p. 642).

Kullander describes a spontaneous ascites tumour of high malignancy occurring in rats. Development of the tumour is favoured by oophorectomy and inhibited by the administration of oestradiol (p. 647).

Marchant describes the changes in the ovaries of mice treated with dimethylbenzanthracene leading up to the appearance of granulosa cell tumours, and also the luteinisation of established tumours. The incidence and histology of the breast tumours which may appear are also reported (p. 652).

Blancifiori, Bonsen and Caschera report experiments on mice suggesting that the hormonal stimulation of pseudopregnancy acts as a promoting agent in the causation of mammary tumours in breasts which have been subjected to the initiating action of methylcholanthrene (p. 662).

Laws has studied the changes in the livers of rats following hepatectomy performed at various times in relation to a course of treatment with 2-acetylaminofluorene. He suggests that during such treatment an irreversible step in the process of carcinogenesis occurs at the onset of nodular hyperplasia, and that this step is taken sooner if hepatectomy is performed early in the feeding period (p. 669).
Hewitt and Wilson have determined the survival ratios among leukaemia cells released from the livers of leukaemic mice immediately after exposure to 60Co gamma radiation. They find no significant difference between the survival ratios for cells from mice breathing 95 per cent oxygen and from mice breathing 95 per cent air during irradiation (p. 675).

Dhaliwal finds that when MH2 virus is assayed on the chorioallantoic membrane the pock count depends very largely on the age of the embryo (p. 685).

Hartmann has found a factor, protein in nature and probably in the nuclear fraction, present in various normal tissues, which inhibits the growth of ascites tumours in rats and mice (p. 693).

Pearson finds that Sarcoma 37 serially irradiated with sub-lethal doses shows an increase in tumour establishment time and a decrease in growth rate, persisting in sub-line passages without further irradiation. Serially irradiated lines of two homologous tumours show no such alteration in behaviour (p. 699).

Adams finds that liver catalase activity is equally depressed by S37 homogenates and normal tissue homogenates. The former increase the granule/EPC catalase distribution ratio; the latter do not. He concludes that S37 homogenate contains an agent which decreases the permeability of the granule membranes to catalase (p. 704).

Calcutt, Doxey and Coates have measured the -SH levels of mouse liver at intervals after treatment with one of the hydrocarbons—anthracene, pyrene, perylene, 3:4 benzpyrene and 1:2:5:6 dibenzanthracene (p. 711).

Harper has extended his previous studies on the intermediary metabolism of pyrene and 3:4-benzpyrene to a range of hydrocarbons, namely, 1:2-benzanthracene, chrysene, 20-methylcholanthrene, 1:2:5:6-dibenzanthracene and anthracene. He concludes that the only important difference between the known metabolisms of carcinogenic and non-carcinogenic hydrocarbons lies in the positions of the molecule at which hydroxylation initially occurs (p. 718).

Harper discusses the metabolism of carcinogenic and non-carcinogenic hydrocarbons in various animal species, and the suggestion that linkage to cellular material, possibly enzymes, within the microsomes accounts for the fact that carcinogenic hydrocarbons undergo hydroxylation principally at positions of the molecule which are inert to chemical attack (p. 732).

Harper finds that 1:2-benzanthracene undergoes hydroxylation in the 2':-position after intraperitoneal and intravenous injection in the rabbit (p. 746).

Hughes has given 3'MeDAB and individual labelled amino acids to suckling rats and examined the recovered polar dyes for activity. He suggests that tryptophan, valine and possibly cystine residues are the substituents in the polar derivatives (p. 751).

Silk, Macintosh, Cooke, Gilowey and Hawthrey have studied the effect of irradiation of various physiological media with some mouse tissue on the respiratory and glycolytic metabolism of ascites tumour cells subsequently added to the media. They have demonstrated an "indirect" effect of X-radiation on respiratory metabolism, which, it is suggested, is due to metabolic products from the irradiated tissue liberated into the medium influencing the added Ehrlich ascites cells and mitochondria (p. 757).

Atkin, Richards and Ross have estimated the DNA content of tumour cells from 132 cases of carcinoma of the cervix and 33 cases of carcinoma of the corpus uteri microspectrophotometrically. They discuss the relation of the DNA values to the chromosome number of the tumour cells and to various clinical features of the cases, particularly the response to radiotherapy (p. 773).

Richards and Atkin report measurements of the DNA content of cells from uterine tumours before, during and after treatment by intracavitary radium or radio-cobalt and discuss the changes observed in relation to the effect of ionizing radiations on DNA synthesis and the mitotic process (p. 788).