These results, while confirming Fischer's observations that heparin produces a combination in serum that is precipitated at approximately pH 5.0, does not substantiate his tentative conclusion that this combination is euglobulin or pseudoglobulin. Fischer's proofs of euglobulin have chiefly concerned procedures which depend upon precipitation at the isoelectric point; a sodium acetate buffer mixture, $CO_2$, dialysis. Precipitation near its isoelectric point is a characteristic of euglobulin; on the other hand, euglobulin, as it is ordinarily recognized, may be salted out with neutral salts. If the heparin-protein complex of new-born serum is euglobulin, it should have been precipitated at 1.00 molar sodium sulfate, or if only a partial combination the salting out might possibly have appeared at 1.50 volume-molar sodium sulfate. We realize that salting out is not an entire proof of a globulin. Salting out does, however, comprise one of the procedures used in differentiating and preparing euglobulin. Fischer's suggestion is exceedingly interesting, but its verification requires more evidence than isoelectric precipitation. It seems to us that this phenomenon observed by Fischer can be explained without assuming the actual formation of globulin.

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## THE RELATION OF THE HYPOPHYSIS TO EXPERIMENTAL DIABETES

IT has been known since 1889 that removal of the pancreas leads to an increase in the blood sugar and appearance of sugar in the urine. Insulin, prepared from the pancreas, is effective in controlling the metabolism of sugar but does not cure the condition. Recently Houssay reported that extirpation of the hypophysis prior to removal of the pancreas was effective in preventing severe diabetes. It appears that we have confirmed this work. Two dogs did not survive long after the second operation, but in them the typical hyperglycemia did not develop. A third animal has survived over three weeks, during which time he has remained in good health. The tolerance for glucose is normal and the fasting blood sugar is within the normal range. No spontaneous glycosuria has occurred.

The animal shows certain symptoms which indicate complete removal of the hypophysis. Autopsy will show whether or not the hypophysectomy was complete and if there is accessory pancreatic tissue. This work is being continued at the University of Chicago.

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## CANCER RESEARCH

IN the January, 1933, number of *The American Journal of Cancer* is an editorial on cancer research. In this the editor states that the prime needs of cancer research are first, *brains;* second, *time;* and third, *money.*

I should like to point out the obvious fallacy of any generalization of this type, even though it be made by one who for years has been connected with an institution utilizing each of the three components mentioned. In a field as complex as that of cancer research one institution may need primarily brains, another time for investigation and a third money. Furthermore, the primary need of any one institution engaged in cancer research may change from month to month or from year to year. It is also obviously true that no one component alone will result in progress. Brains without time or money result merely in theories. Time alone is obviously sterile. Money without brains or time is a material and impersonal factor. If each scientific man would avoid the field of generalization about the work of all others and would apply himself to his own problems in the way that he believes best, utilizing, in the proportions which he is able to find them and is able to develop them, the three elements of brains, time and money, more progress will result.

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# REPORTS

## APPROPRIATIONS FOR GRANTS IN AID BY THE NATIONAL RESEARCH COUNCIL

THE National Research Council wishes to announce that the research aid fund of which it has had charge for the past three years is to be continued during the present calendar year, 1933. The fund is administered by a special committee on grants in aid of research, which is composed of the chairman and treasurer of the council and of the chairmen of the council's seven divisions of science and technology. This committee will be ready to consider requests for grants of moderate amount from this fund for the support of the individual research work of qualified investigators in the fields of the natural sciences, who are citizens of the United States or of Canada.

Requests for grants from this fund will be acted