N.: Ventricular Fibrillation. Treatment and Prevention by External Electric Currents, N. E. J. Med. 262: 105 (Jan. 21) 1960.)

BLOOD OXYGEN TENSIONS A catheter-type P_{O_2} electrode has been developed which permits the polarographic continuous recording of the blood oxygen tension *in vivo*. The electrodes have the size of ordinary cardiac catheters in yield continuous P_{O_2} tracings in the animal over several hours, with a standard deviation of less than three per cent. With changing inspiratory oxygen concentration, the time for reaching a new equilibrium was found to be three to four minutes. While the method has not yet been applied in man there should not be any practical obstacles to doing so. *(Kreuzer, F., and others: A Method for Continuous Recording in Vivo of Blood Oxygen Tension, J. Appl. Physiol. 15: 77 (Jan.) 1960.)*

CONTINUOUS *p*H MEASUREMENT When hypothermia is rapidly inducted by corporeal cooling system and adequate oxygenation is maintained by a respirator, the blood *p*H increases. Myocardial irritability also increases at reduced temperatures. The increased blood *p*H further accentuates the myocardial irritability. Reducing blood *p*H at lowered body temperature reduces myocardial irritability. An accurate monitoring system providing continuous blood *p*H measurements is described. *(Edmark, K. W.: Continuous Blood pH Measurement with Extracorporeal Cooling, Surg. Gynec. & Obst. 109: 743 (Dec.) 1959.)*

OXIMETRY Oximetry is based on the differences between the absorption spectra of reduced and oxygenated hemoglobin. The details of this technique are discussed, particularly the problems arising from the corpuscularity of blood, the choice of wave length and photocell, inhomogeneity of tissues, and the effect of blood flow on transmission of light. The most important difficulty is that the indicated saturation values are not absolutely reliable. This is aggravated by the notorious tendency of selenium cells to show individual variation in their sensitivity to illumination. *(Nilsson, N. J.: Oximetry, Physiol. Rev. 40: 1 (Jan.) 1960.)*

OXYHEMOGLOBIN DISSOCIATION A shift to the right of the oxyhemoglobin dissociation curve had previously been shown to exist in anemic patients, by *in vitro* methods. To confirm its presence *in vivo*, 23 subjects with hemoglobin levels ranging from 3.4 to 13 gm. per 100 ml. were examined. All cases were of chronic anemia with no abnormal hemoglobin present, and no significant cardiopulmonary derangement demonstrated. A steady state was achieved in each patient by allowing him to breathe oxygen for 25 minutes before obtaining arterial samples. To obtain points at the lower end of the wave occasionally mixed venous blood was used. The curve was corrected to *p*H 7.4 Moderate displacement of the curve to the right was demonstrated with hemolobin below 9 Gm. per 100 ml., while below 6.5 Gm. per 100 ml. it was marked. The change is desirable in that it facilitates oxygen uptake by the tissues. *(Rodman, T., Close, H. P., and Purcell, M. K.: The Oxyhaemoglobin Dissociation Curve in Anemia, Annals of Int. Med. 52: 295 (Feb.) 1960.)*

AMINE OXIDASES The amine oxidases are classified according to five general groups, amine oxidase, histaminase, mescaline oxidase, spermine oxidase, and menzylamine oxidase. The substrate specificity of amine oxidase is in a large part dependent upon the source of the enzyme. With the possible exception of spermine oxidase, very little is known about their functions. The only function which may be tentatively ascribed to amine oxidases in general is that they may act to detoxicate amines entering the body from the alimentary canal. This assumption finds support in the high concentration of these enzymes in the intestinal mucous membrane and liver and, in the case of spermine oxidase and benzylamine oxidase, in blood. Much has been made of the relation of the biosynthesis and metabolism of amines in the brain to cerebral activity but it is well to remember that our knowledge of the function of these amines is still so limited as to make it difficult to implicate amine oxidases in these processes. *(Hagen, P., and Weiner, N.: Enzymic Oxidation of Pharmacologically Active Amines, Fed. Proc. 18: 1005 (Dec.) 1959.)*