

a bit more of a game. Laugh at yourself and others will laugh with you.

And so to all of you may I suggest that as physicians you owe yourself and society more than you have given. Adopt all or part of the following:

- 1) Join with the public in an analysis of priorities.
- 2) Reverse the tendency toward technology and away from ideology.
- 3) Help shape a new morality and a new ethic.
- 4) Return to public service through involvement in community affairs.
- 5) Recognize that change is a way of life, that the human spirit is resilient, de-

signed for struggle, and has enormous potential for growth.

- 6) Join with all physicians in having a collective professional concern for the public's health.
- 7) Emphasize the need for wisdom to be combined with wit. Don't take yourself or the world too seriously, for it will impair your judgment.
- 8) Be confident, for we can destroy ourselves by cynicism and disillusion just as effectively as by bombs.

Remember that it was a physician, Sir William Osler, who said, "We are here to add what we can to, not to get what we can from, life."

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### Neurophysiology

**BIOELECTRIC CORRELATIONS** The subcellular fragments, microsomes, of crab nerve and of rat brain were examined extensively for ATPase properties and the possibility that calcium is bound actively to these particles in the presence of ATP. The evidence found supports the concept that sodium and calcium compete for sites on the microsomes and that sodium attachments result in ATPase activity but calcium attachments do not. Calcium binding is actively enhanced in the presence of magnesium by addition of ATP and, likewise, potassium increases calcium binding. Some calcium which is bound may be released from cell membranes in the absence of metabolic activity and may account for the transmembrane resistance decline and other electrophysiologic changes in the excitable nerve membrane deprived of oxygen. (Perkins, M. S., and Wright, E. B.: *The Crustacean Axon. I. Metabolic Properties: ATPase Activity, Calcium Binding, and Bioelectric Correlations*, *J. Neurophysiol.* 32: 930 (Nov.) 1969.)

### Obstetrics

**HYPOCARBIA** The effects on the fetus of spontaneous and induced hyperventilation were assessed in 58 patients. A decrease in maternal  $P_{CO_2}$  was accompanied by a corresponding decrease in fetal  $P_{CO_2}$ . Severe maternal hypocapnia with a maternal venous  $P_{CO_2}$  below 22 to 23 mm Hg was associated with a small but significant decrease in umbilical vein and artery oxygen tension. However, in this study, these changes were not accompanied by an oxygen debt, low Apgar scores, or metabolic acidosis. Maternal hyperventilation, with hypocapnia and respiratory alkalosis, was associated with increased maternal and fetal lactate and pyruvate concentrations. (Law, J. A., Boston, R. W., and Cervenka, F. W.: *Effect of Low Maternal Carbon Dioxide Tension on Placental Gas Exchange*, *Amer. J. Obstet. Gynec.* 106: 1032 (April) 1970.)