

A purified insulin preparation gives with flavianic acid a compound of constant composition. This compound was converted into insulin flavianate-pierate, then into pierate, hydrochloride and finally pure insulin. The composition of all these five compounds, which can be recrystallized and are often obtained in a form of spherulites, shows a chemical composition on analysis which agrees one with each other. It can be reasonably assumed, therefore, that the insulin obtained in this way represents a chemical entity. The most simple empirical formula for insulin obtained from dozens of analyses is $C_{69}H_{102}O_{22}N_{18}S$, and the molecular weight therefore is equal to 1,565. The structure of the compound will probably be one of a polypeptide composed of about fifteen aminoacids. It must be conceded, however, that dealing with such high molecular substances the analytical results agree almost as well with the formula $C_{74}H_{114}N_{20}O_{24}S$, with a molecular weight of about 1,700. It is of little importance at the present time to know which of the two formulas is right, as the synthesis of the substance appears to be far off. The convulsive dose for rabbits of pure insulin obtained in this way is about 0.08 mg and therefore the old clinical unit equals 0.026 mg. On heating pure insulin a crystalline sublimate appears which is now being investigated.

The practical benefit of the work presented here is greater uniformity of action of insulin compared with the usual insulin makes and the possibility of standardization of insulin by weighing the substance without the use of animals. The method has been also applied with success for preparation of insulin directly from pancreas without the use of alcohol. Results so far obtained yielded an insulin preparation with a clinical unit equal to 0.06 mg and it is very probable that pure insulin can be obtained in this way. The method is being applied to the isolation of other hormones of similar structure to insulin.

CASIMIR FUNK

STATE SCHOOL OF HYGIENE,
WARSAW, POLAND

MOUNT JORDAN

I NOTICE in the press that a peak in the King's Kern Divide in the High Sierras in Tulare County has been named Mount Jordan. Some thirty years ago a peak farther north, the second highest in the state, one of a series called the Palisades, was called Mount Jordan, by Professor Bolton Coit Brown, of Stanford University. This name went on the maps until Dr. John N. LeConte, in making a map of the region, discovered that the early Whitney Survey had called the mountain in a general way the North

Palisade, not exactly as the name of a peak but as that of a mountain ridge. The Lieutenant Wheeler Survey which followed gave this particular crest of the mountain the name of North Palisade. The stream at the foot of the mountain flowing into the San Joaquin, I believe, is still called Jordan Creek.

Some years after, a number of us from Stanford climbed one of the high peaks of the King's Kern Divide and named it Stanford University Peak, or in short Mount Stanford. Adjoining this is a very rocky point early called Gregory's Monument, and a third peak of some 12,000 feet has remained unnamed. Dr. John N. LeConte and Mr. Francis P. Farquhar, a mountaineer prominent in the Sierra Club and chairman of the committee on names, have named this peak Mount Jordan, having the name put on the maps of the U. S. Geological Survey. Mr. Farquhar observes: "We feel that you will be particularly pleased at the selection of a peak in the region where you spent some time in 1899 and which was the inspiration for your admirable book on the Kings-Kern Divide."

I can stand it if the mountain can and I feel honored to be connected anywhere with one of the giants of the Sierras.

DAVID STARR JORDAN

STANFORD UNIVERSITY

THE PRICE OF HONOR

It may be of interest to American scientific men to see the correspondence concerning an honor which it has been proposed to confer upon some of them.

Ph.D.

ACCADEMIA INTERNAZIONALE DI LETTERE E SCIENZE
Napoli Italia

The Vice-President
for the Americas

5, Place Vendome
Paris, France
28 Dec. 1925

My dear Colleague:

In view of your widely appreciated academic services I have taken the liberty of submitting your name for the distinction of membership in the Academy of Letters and Sciences at Naples, a body of eminent persons, originally started by forty-six "founder-academicians," almost all professors in the Royal University of Naples. Professor Dr. Pietro Amoroso, Duke of Rijeka, the President-General, advises me that your possible candidature will prove acceptable to the Academic Senate.

It may interest you to learn that Woodrow Wilson formally accepted honorary membership in the Academy. Thomas A. Edison, as well as Chancellor E. E. Brown of New York University, and President N. M. Butler of Columbia University, are among the distinguished American members.

Kindly inform me whether you will accept election, in which case your diploma and the academic medal will be posted to you directly from Naples, registered.

Expressing the hope that you will lecture before the Academy, when passing through Naples, I felicitate you upon this well-merited distinction from abroad, and remain,

Faithfully yours,

FRITS HOLM,

LL.D., D.C.L., D.Lit.

Vice-President for the Americas

To H. E. Lt-Gen., Prof., Dr. Frits Holm, Duke of Kolachine, G.O.G., Vice-President of the Academy of Letters and Sciences of Naples, Chamberlain to His Royal Highness the Count of Casertina,
5, Place Vendôme, PARIS.

Excellency:—

In response to your recent communication I take pleasure in accepting the distinction of membership in the Academy of Naples, so graciously tendered by the Academic Senate through you.

Of the three forms of membership, namely Protector (\$250.—for life), or Honorary Academician (\$60.—for life), or Corresponding Academician (\$25.—for life) I accept the grade of

and I do myself the pleasure of inclosing herewith bank-draft on Paris in dollars (or bills) for the amount in question, in the expectation, that you will cause my diploma and medal to be forwarded registered to the above address as soon as convenient after election.

I enclose a visiting-card, and *print* below the manner in which I desire my name and titles to appear in the diploma, and I express through you, Excellency, my thanks to the officers and members of the Academy of Letters and Sciences.

Faithfully yours,

EUGENOTHENICS

PROFESSOR HERBERT S. JENNINGS, in his timely little volume "Biology and the Advancement of Man," points out that "Heredity and environment have proven so inextricably mingled in the result that in practically no case can we claim with certainty that either alone is responsible." Since it is next to impossible to isolate the effect of heredity from that of environment, or *vice versa*, there is developing a great demand for a word which will apply to both fields of study. Since the term *eugenics* is usually construed to mean the science which deals with the improvement of the human race by selecting better hereditary qualities, and *euthenics* the study of race improvement by the regulation of the environment, neither of these terms is applicable when both fields are being considered. The term *eugenothenics* (u-jen'-o-then'-iks), which is merely a combination of the terms eugenics and euthenics, seems to supply the long-felt need. *Eugenothenics, then, is the study of race improvement by the regulation of both heredity and environment.* Many so-called courses in eugenics

deal as much with environmental factors as they do with hereditary principles. They are in reality eugenothetical courses. One who is well versed in the science of eugenics and euthenics, and especially in their relationships, is a eugenothenicist.

WILLIAM M. GOLDSMITH

QUOTATIONS

RESEARCH AND TEACHING

ON the importance of promoting scientific research in America there can be no serious difference of opinion. There may, it is true, be doubts as to whether it can be "promoted," in the popular sense of the term. Certainly the qualities of mind which make research fruitful can not be manufactured to order, nor can the physical equipment which money will buy be substituted for the intellectual and spiritual gifts of nature. But such doubts furnish no ground of argument against doing all that it is possible to do. Money can not create genius, but it can give genius its tools and its opportunity. The proposals of the new "National Research Endowment," announced on February 1 by a board of trustees of which Secretary Hoover is chairman, and of which Professor A. B. Lamb, of Harvard, is a member, will, it is hoped, receive a wide and effective support. Although the published "declaration" was limited to general principles, it is said that the trustees of the endowment intend to raise a fund of \$50,000,000, and that it is a part of their plan to endow research professorships at American universities. The Milton Fund for Research at Harvard, whose distribution for the next academic year is announced in our present issue, serves a similar purpose. It enables members of the faculties at Harvard to secure the time and the means of conducting research while continuing as members of an institution for higher education.

There have been signs in recent years of a tendency to establish independent agencies for research, and thus to divorce research from teaching and from the university environment. There is reason to believe that such a tendency, if carried far, would be a serious mistake. The university is the natural breeding-ground for scientific interests. In the long run the teachers will have to be relied upon to furnish the scholars, both in their own persons and in the pupils to whom they impart their spirit and method. To build up a new personnel for research would leave the teaching profession as overburdened as ever, and would cut off one of the principal hopes of relief. To accentuate the division between teaching and research would be equally bad for the mere teacher and for the mere man of research. The former would lose in freedom and incentive and in the power to