Book Reviews

Clinical versus Statistical Prediction. A theoretical analysis and a review of the evidence. Paul E. Meehl. Univ. of Minnesota Press, Minneapolis, 1954. x + 149 pp. $3.

As a clinical, as well as an experimental, psychologist, the author confines himself to an examination of the question posed by his title in the field of psychology. He defines statistical prediction as the mechanical combination of data for classification purposes and determination of a probability figure derived from empirical relative frequencies. Clinical prediction proceeds through the formulation of a psychological hypothesis about the individual, perhaps in a psychiatric staff conference. That is to say, clinical prediction is characterized by nonmechanical combination of given data. The author, in this volume, is not concerned with a comparison of the usefulness of psychometric and nonpsychometric data for predictive purposes.

Paul Meehl takes great care in examining, in principle, the special predictive activity of the clinician, particularly in the conduct of the clinical interview. He disagrees with the position of T. R. Sarbin that clinical prediction is fundamentally actuarial. Instead, he suggests that high-level clinical hypothesizing is akin to the psychological processes involved in the creation of scientific theory. However, Meehl is aware that his argument is not quite as solid as might be desired.

There is a chapter devoted to a thorough review of the surprisingly scant literature of empirical comparisons between clinical and statistical prediction. In the narrow range of problems studied, the statistical approach shows itself somewhat superior to the clinical, although optimum statistical weighting procedures frequently are not used. Much remains to be done to determine the proper domains of statistical prediction on the one hand and clinical prediction on the other. Meehl's present conclusion is that the statistical method is preferable, when socially defined outcomes, such as duration of disease or success in training, are to be predicted. In any case, although we may choose the nonactuarial approach under certain circumstances, it has to be validated by the use of statistical methods.

This book, although written in an informal, pleasant style, contains much technical material of primary interest to the psychologist; however, persons facing similar problems in other fields, as for instance in medicine, will also benefit from this fair-minded, stimulating clarification of a thorny issue.

LEE HERRERA
Department of Medical Statistics, New York University College of Medicine

Pharmacology in Medicine. A collaborative textbook. Victor A. Drill, Ed. McGraw-Hill, New York–London, 1954. xii + 87 chapters + index. Illus. $19.50.

Pharmacology in Medicine is a collaborative textbook and reference edited by Victor A. Drill, lecturer in pharmacology, Northwestern University Medical School, formerly professor of pharmacology, Wayne University College of Medicine. It includes contributions and discussion presented by some 81 authorities in their respective fields of speciality.

It is presented in a uniformative and authoritative method for quick reference by students, physicians, and other members of the allied professions alike. The clinical approach is outstanding in offering to the students and members of the profession an opportunity to keep abreast of virtually the most recent advances in therapeutics and to acquire the basic principles and theories necessary for rational use of drugs in current use as well as a knowledge for the evaluation of those to be introduced later.

The system used for numbering pages is something relatively new. Each chapter is numbered as a separate entity by chapter and page, for example, 1/1, 1/2, 1/3, 2/1, 2/2, 3/1, 3/2, and so forth. This method of numbering has the advantage of grouping related material by page numbers, as well as by chapter heading, and facilitates reference.

It is closely correlated with the related medical sciences in scope. The most recent and important advances in medicine serve as a basis for the interpretation of action and uses of drugs. The application of pharmacodynamics to therapeutics is emphasized. Among the recent additions in books of this sort under chapter headings are "General anesthesia: intravenous agents," "Drugs in epilepsy and hyperkinetic states," "Veratrum alkaloids," "Insecticides, rodenticides and agricultural poisons," "Oral and intravenous feeding."

In addition to the specific chapters mentioned, ideas are expressed on anticarcinogenic agents and others that have not found extensive therapeutic use. Description of newer concepts and/or correlative data is presented under one heading in chapters on "Drug addictions," "Respiratory reflexes during anesthesia," "The role of the skeleton in pharmacological and toxicological responses."

The organization of the book, for the most part, is in the standard manner acceptable to students and practitioners. The chapter on prescripiton writing and drug preparation is well presented and, at the same time, presented in light of current trends and practice.

The contributors assembled by the editor are stimulating and informative and detailed in their outlook and their methods of presentation. All information is well documented and evaluated. This should easily become recognized as an important book, especially to the students of pharmacology, medicine, and dentistry.

HURD M. JONES, JR.
School of Pharmacy, Texas Southern University

Standard Values in Nutrition and Metabolism. E. C. Albritton, Ed. Saunders, Philadelphia–London, 1954. xiii + 380 pp. Illus. Paper. $6.50.

Like the pockets of a typical healthy boy, this impressive monograph is packed full of a large variety of things, many of which may seem to be somewhat unrelated. Nevertheless it must be concluded that the monograph will serve a useful purpose through the concise assemblage of enormous amounts of information.

The work was compiled from the contributions of more than 800 specialists in widely varied fields of the biological sciences. There are 223 pages of tables and 16 pages of diagrams covering the nutrients necessary for plants, fungi, yeasts, bacteria, protozoans, invertebrates, vertebrates, and so forth; nutrients utilized by various animal forms and plant forms; daily nutrient allowances for man, dog, rat, and a host of other animal forms; diets and culture media for a great variety of animals; culture media and fertilizers for various plants; nutrient and energy values of foodstuffs and feedstuffs; signs of nutrient deficiencies and excesses; pathways of metabolism; end-products of metabolism; rates of respiration; and