(3) All participants refer to mechanical guarantees of confidentiality, usually in the form of computer passwords. These devices, needed to prevent illegitimate access to records, cannot cope with a more difficult but realistic problem. In any large data management operation, it may be expected that eventually someone will bribe or threaten an employee with legitimate access to sensitive data into violating confidentiality, if the data are valuable enough. The problem is real, but the solutions currently available are still very primitive.

(4) All the contributors consider what we might call "epidemiological adequacy"—quality and completeness of reporting. There is probably no escape from the increased variability in quality that accompanies increase in scale. One virtue of the register, however, is that it imposes uniformity of format locally, if only to meet the demands of the machine. Symposia like this one provide the occasion for participants from various registers to identify common needs, thereby increasing the shared component of information collected in different places. Ultimately this common ground will need to be substantial if different centers are to provide confirmation and replication of each other's findings or pool resources for more powerful studies.

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Current Trends in Sphingolipidoses and Allied Disorders is an interesting addition to a very valuable series. It contains the scientific contributions to a 1975 International Symposium on Sphingolipidoses and Allied Disorders and is essentially a review of the current state of knowledge in this area. It perhaps reflects the changing orientation of investigators in this field; greater emphasis is now placed on the more recently described disorders, such as fucosidosis and mannosidosis, than on the more familiar storage disorders, such as Tay-Sachs disease. There are also discussions of disorders—adrenoleukodystrophy, neuronal ceroid lipofuscinosis, and polyunsaturated fatty acid lipidosis—for which specific enzyme deficiencies have yet to be elucidated. Of particular interest to clinicians are the descriptions of new electrophoretic and chromatographic assay systems for specific lysosomal enzymes. The micro-analytical techniques introduced by P. Hosli have already proved useful in establishing, through complementation analysis, that specific disorders are composed of a number of distinct biochemical subtypes.

Several approaches to enzyme replacement therapy are also thoroughly discussed, including the direct incorporation of purified enzyme into deficient fibroblasts or, by intravenous injection, into the patient and the potential usefulness of targeted liposomes as enzyme carriers. The effects of zinc and cobalt on acid α-mannosidase are described, and the intriguing possibility is raised that the administration of these trace metals (by raising residual enzyme activity) might be of therapeutic value to patients with mannosidosis.

This book would be most valuable to those interested in biochemical genetics and to clinicians involved in the diagnosis and care of individuals with lipid storage disorders.

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