make is that the latter can only be a small and unrepresentative sample of American research in this field.)

The reviewer can add little to the justifiably warm praise given to this book in the introduction by Dr. Mary Sheridan. Like her, one hopes that the work put into it will continue, so that these reviews can be kept up to date.

Anyone working in this field places himself under a serious and totally unnecessary handicap if he does not have access to these Research Volumes.

Cellular Organelles and Membranes in Mental Retardation. Institute for Research into Mental Retardation Study Group No. 2. Edited by P. F. BENSON. (Pp. viii + 224; illustrated + tables. £3.50.) Edinburgh and London: Churchill Livingstone. 1971.

This volume is a record of the contributions and discussions given at the second study group meeting held under the auspices of the Institute for Research into Mental Retardation. There was no single unifying theme, and in fact 4 topics were discussed including renal tubular function and mental subnormality, lysosomal function and disease, and chromosomal redundancy associated with mental subnormality. The contributions, 16 in all, vary widely in their aim from a review of an already well-documented condition, e.g. Hartnup disease, and a synopsis of defects in renal tubular reabsorption of amino acids, to descriptions of original studies. Inevitably, much of the work discussed here has already been published. All the papers are highly laboratory orientated and will appeal mainly to the specialist. It is doubtful whether the general paediatrician will find much of interest unless he has a particular concern in inborn errors of metabolism. The discussions after each paper are more rewarding than at most such meetings and, though usually highly technical, occasionally a point of general interest emerges, as for example that it was worth while definitely establishing or excluding a diagnosis of a specific hereditary metabolic disorder even when no treatment was available.

The volume is well produced, though somewhat expensive for its size especially considering no costly illustrations are given.

E.A.T. (Edinburgh Articulation Test). By A. ANTHONY, D. BOGLE, T. T. S. INGRAM, and M. W. MCISAAC. (Pp. 86; assessment sheets + picture book + conversion table. £12.22.) Edinburgh: Churchill Livingstone. 1971.

The Edinburgh Articulation Test is a unique addition to the collection of tests and assessments currently at the disposal of those concerned with the description of deviant or delayed speech development. It is unique in its combination of standardized test and qualitative assessment components.

Actual administration takes about 20 minutes. A knowledge of phonetics is required. The subject is recorded naming 41 items from the picture book. (Some of the attractive illustrations are disappointingly ambiguous for young children.) From these utterances, 77 consonants or clusters are transcribed onto the quantitative score sheet and scored on a right/wrong basis. A lengthy section in the textbook gives guidance on scoring.

The raw score thus obtained can be used to find the subject's articulation age (between 3 and 6 years), or it can be converted to a standard score. For the low achievers the examiner moves on to the five-page qualitative assessment. The same data are used. Each item is then matched to International Phonetic Alphabet symbols in one of six columns which are headed 'adult form' through to 'very immature' and 'atypical substitutions'. If the subject's articulatory attempt cannot be matched, it is inserted into the column containing the most phonetically similar sounds. Here subjectivity appears to creep in. For example, does one match place or manner of articulation? This analysis provides a measure of articulatory maturity and alerts the examiner to features of atypical or extremely retarded speech development which may require remedial treatment.

It is stressed in the textbook that the items are based on data collected from normal Edinburgh children and they provide an open-ended framework. It remains to be seen whether the articulation of children from other areas in Great Britain will readily fit into this framework and be successfully subject to the same classification. However, it is certain that this test, minutely detailed and rigorously standardized, will have many useful applications.

Specific Dyslexia. The Research Report of the ICAA Word Blind Centre for Dyslexic Children. By SANDHYA NAIDOO. (Pp. xv + 165; 3 figures + 49 tables. £3.00.) London: Pitman. 1972.

Sandhya Naidoo has published the results of a joint investigation by physicians and educational psychologists under the auspices of the Invalid Children's Aid Association, of intelligent, apparently normal children with a specific impairment in their capacity to learn to read and to spell. All cases in which concomitant emotional disturbance or deficient educational opportunity might have been causal were excluded from the investigation, so that environmental factors could not obscure constitutional factors.

In most subjects one or several of the following points were observed: delayed speech development and language immaturity, immature perceptuomotor ability, atypical cerebral dominance, poor visuospatial ability, auditory perceptual weaknesses, and disturbance of sequential organization (visual and/or verbal). No common aetiology, however, emerged. In some cases symptoms of disorder seemed to reflect differential rates of maturation rather than true abnormality. In others, the disability could have been inherited, or acquired as a result of early brain damage, or minimal neurological impairment of possible pathological origin was indicated.