

DIRECTOR'S REPORT TO THE BOARD OF DIRECTORS ON THE ACTIVITIES OF
THE ATLANTIC RESEARCH CENTRE FOR MENTAL RETARDATION, July to December,
1967.

The Atlantic Research Centre for Mental Retardation began operation officially on July 1, 1967, with the appointment of Dr. Philip Welch as a full-time investigator and Medical Geneticist. Since then, considerable effort has been expended to establish a cytogenetic laboratory on a firm footing. Such a laboratory is an essential research tool in many genetic investigations of mental retardation. To begin with, a micro-method for the culture of human lymphocytes from peripheral blood was instituted. Initial technical difficulties, largely related to cramped temporary quarters were surmounted, and chromosome analysis has now been carried out on some 30 individuals, many overtly retarded or presenting strong clinical indications that retardation would eventually develop. In some instances families have travelled several hundred miles in order to avail themselves of the cytogenetic facilities afforded by the Atlantic Centre for Mental Retardation.

In addition to chromosome analysis on peripheral blood cells the laboratory has also undertaken the examination of buccal smears for sex chromatin, a procedure which is an essential adjunct to chromosome analysis.

A detailed filing system has been introduced through which full details of every investigated family are kept and cross-indexed under both the names of principal family members and the pertinent diagnoses. The importance of the existence and availability

of such family records for any studies of the genetic transmission of disease can hardly be overstressed.

In another area of activity, contact has been established with certain families in the Yarmouth area, some of whose members exhibit the so-called "Nova Scotia Variant" of Niemann-Pick disease. In its classical form, this disease is characterized by mental retardation and death early in childhood. Evidence in the medical literature suggests the existence of a milder form of the disease in a Franch Canadian group originating in Yarmouth, Nova Scotia. A full scale investigation of this condition is planned for the near future, access to the population group being obtained through families already known to be affected, and with the help of local medical practitioners.

Further development of the facilities of the cytogenetic laboratory is limited by the present inadequate quarters. However, following the projected move into new laboratories in the Sir Charles Tupper Building early in 1968 we plan to expand the diagnostic facilities now available through the development of tissue culture and autoradiographic techniques. It is also hoped that a research scientist in the field of neurochemistry will be appointed to the Atlantic Centre before too long, to introduce a vital added dimension to the research program.

There is no doubt that valuable progress has been made in an extremely short period of time in establishing the research activities of the Atlantic Centre. A list of the personnel of the Centre is appended for information. As soon as the move to the new laboratories is complete, it is anticipated that an "official opening" will be arranged, to enable the members of the Board of

Directors, as well as other interested persons, to see the new facilities at first hand, and to see the type of work which is being done in improving our understanding and treatment of the many disorders of infancy and childhood which may result in mental retardation.

Respectfully submitted,

Richard B. Goldbloom

Richard B. Goldbloom, M.D., F.R.C.P. (C)

Professor and Head
Department of Paediatrics
Dalhousie University

and

Director
Atlantic Research Centre for
Mental Retardation.

ATLANTIC RESEARCH CENTRE FOR MENTAL RETARDATION

RESEARCH PERSONNEL

	(Degrees)	(Title)
Dr. J. Philip Welch	M.B.,C.H.B.	Geneticist
Mrs. Joan Teed	B.Sc.	Research Technician
Mrs. Joanne Clark	B.Sc.	" "
Mrs. Elaine Steele	R.T.	" "