

# **Mental retardation grants**

**PART II RESEARCH AND DEMONSTRATION**

**Fiscal Year - 1968**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

### **Discrimination Prohibited**

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Therefore, the mental retardation grants program, like every program or activity receiving financial assistance from the Department of Health, Education, and Welfare, must be operated in compliance with this law.

# Mental Retardation GRANTS

Fiscal Year 1968

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The Secretary's Committee on Mental Retardation  
Washington, D.C.      January 1969

## INTRODUCTION

This booklet is Part II of a two-part publication which lists mental retardation grants awarded by the U. S. Department of Health, Education, and Welfare in fiscal year 1968 (July 1, 1967 to June 30, 1968). This part includes those grants awarded in the areas of Research and Demonstration. Part I (to be issued soon) includes grants which were awarded in fiscal year 1968 in the general areas of Training and Construction.

A system of classification devised by the Research Subcommittee of the Secretary's Committee on Mental Retardation has been used in arranging the grants in a systematized manner in this publication.

The classification system used is as follows:

- 1) Etiology
- 2) Epidemiology
- 3) Pathophysiology
- 4) Diagnosis and/or Evaluation
- 5) Prevention
- 6) Amelioration
  - a. Education
  - b. Vocational Rehabilitation
  - c. Medical Treatment
- 7) Other

The Subcommittee on Research in arriving at the classification system first agreed upon functional definitions for the terms used in the classification system. These definitions are included here for purposes of information.

1. Etiology includes all factors which cause mental retardation. These may be specific disease entities, trauma poisonings, or other similar factors. All research directly and uniquely related to a single disease agent is included.
2. Epidemiology includes those studies which relate to epidemiology of mental retardation, but not any of the specific diseases. Specific disease entities which might be etiologic agents of mental retardation have their epidemiology studies included under that disease alone.
3. Pathophysiology intends to consider all changes and events which are related to mental retardation and independent of etiology. It is possible that some of the projects included here apply to several different diseases.
4. Diagnosis and/or Evaluation includes those projects which are related to the evaluation of brain function and the mentally retarded state, rather than a specific disease entity which might cause

mental retardation. Diagnostic procedures which are specific for a disease entity are included under studies of that disease under "Etiology".

5. Prevention includes those projects aimed at the prevention of a disease which might possibly result in mental retardation. The disease may be prevented by elimination of some vector or etiologocial agent.
6. Amelioration includes those projects relating to the training, education, rehabilitation of the retarded or in effect helping them to pursue a better life or to better adjust to their situation.
7. Other includes those projects which do not appear to clearly fall within the previous 6 classification categories. (Note: All of the demonstration grants funded by the Division of Mental Retardation, Social and Rehabilitation Service, have been included under "Other".)

An abstract describing the purpose of the research or demonstration project is included for most grants.

There are some project grants with the notation "No abstract supplied." This means that the funding agency was not furnished with the project grant abstract report by the grantee and hence no narrative material was available.

The subject index on page 133 classifies the project grants by the narrative abstract statement furnished by the grantee. The subject in the index is followed by the number assigned to the project grants which will enable the reader to locate easily his area of interest.

Additional information concerning the grants shown may be secured from the grantee or the agency awarding the grant.

A full discussion of the Department's mental retardation programs will be found in Mental Retardation Activities of the Department of Health, Education, and Welfare, January 1969. This is available from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, price \$1.00 per copy.

Special recognition is hereby given to Mr. Sheldon Schneider, for his assistance in the publication of this booklet. Mr. Schneider, a Florida State University graduate student was assigned to the Secretary's Committee on Mental Retardation, for part of his field experience, and it was during this period that he assisted the Committee with this publication.

## Explanation of Format

The title of the grant appears first followed by the name and address of the grantee. The dates indicate either the date the grant was awarded, or the inclusive dates for which funds were made available. There is also an indication of whether the grant is an initial one or a renewal. The amount of money represents only the funds awarded in the fiscal year 1968.

The symbol in parenthesis following each listing indicates the agency making the award:

SRS: Social and Rehabilitation Service  
Office of Research and Demonstrations  
Children's Bureau  
Rehabilitation Services Administration

PHS: Public Health Service

NICHD: National Institute of Child Health and Human  
Development

NINDB: National Institute of Neurological Diseases and  
Blindness

NIMH: National Institute of Mental Health

OE: Office of Education

Requests for information may be addressed to the agency listed above, Department of Health, Education, and Welfare, Washington, D. C. 20201.

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RESEARCH AND DEMONSTRATION GRANTS

ETIOLOGY

- 0010 ABO ERYTHROBLASTOSIS-IMMUNOLOGIC STUDIES (R01 02874-02); HUNTLEY, CAROLYN C., WAKE FOREST UNIVERSITY, WINSTON-SALEM, N.C.; 5/68-4/70. RENEWAL, \$28,194. NICHD

THIS RESEARCH PROPOSES TO STUDY THE OBSTETRICAL AND NEWBORN PATIENTS AT THE UNIVERSITY OF PUERTO RICO HOSPITAL AND AT THE NORTH CAROLINA BAPTIST HOSPITAL WITH REFERENCE TO HEMOLYTIC DISEASE OF THE NEWBORN.

- 0020 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT (P01 00718-09); J. YERUSHALMY, KAISER FOUNDATION HOSPITALS, OAKLAND, CALIFORNIA; 4/68-3/69. RENEWAL, \$538,543. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE RELATIONSHIP OF MEDICAL, GENETIC, BIOLOGIC, AND ENVIRONMENTAL FACTORS IN THE PARENTS--INCLUDING EVENTS DURING PREGNANCY, LABOR AND DELIVERY--TO NORMAL AND ABNORMAL DEVELOPMENT OF OFFSPRING AND TO OCCURRENCE OF NEUROLOGICAL ABNORMALITIES.

- 0030 BLOOD GROUPING STUDIES (R01 00720-08); J. YERUSHALMY, KAISER FOUNDATION HOSPITALS, OAKLAND, CALIFORNIA 4/68-3/69. RENEWAL \$538,543. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE BLOOD SAMPLES OF HUSBAND, WIFE, AND INFANT AND TO PERFORM DETAILED EXAMINATION FOR BLOOD GROUPING, TYPING, AND BLOOD GROUP ANTIBODY TESTS. IT WILL THUS BE POSSIBLE TO STUDY THE EFFECTS OF SUBTLE AND COMMON BLOOD GROUP INCOMPATIBILITIES PRODUCING POTENTIAL DISEASE IN THE INFANT AND TO STUDY THE INHERITANCE OF BLOOD GROUPS IN FAMILIES.

- 0040 CAUSES OF MENTAL RETARDATION IN INFANCY (R01 02387-02); EGAN, THOMAS J., CHILDREN'S MEMORIAL HOSPITAL, CHICAGO, ILLINOIS; 10/67-9/69. RENEWAL \$12,130. NICHD

THIS RESEARCH PROPOSES TO EVALUATE THE IMPORTANCE OF ACCUMULATION OF GALACTITOL IN THE TISSUES OF GALACTOSE-LOADED RATS IN PRODUCTION OF PATHOLOGY IN THE ORGANS TO BE EXAMINED, SUCH AS THE LIVER, KIDNEY, BRAIN, SKELETAL MUSCLE AND HEART.

- 0070 CYTOGENETIC STUDIES IN MENTAL RETARDATION, (1) R01 00339-0751, (2) R01-



0039-08, BREG, W. ROY, SOUTHBURY TRAINING SCHOOL, SOUTHBURY, CONNECTICUT,  
(1) 7/67-4/69, (2) 5/68-4/69, RENEWAL, (1) \$2,066, (2) \$37,366. NICHD

THIS RESEARCH CONCERNS CHROMOSOMAL STUDIES DONE ON SELECTED  
CASES OF MENTAL RETARDATION AND, WHEN INDICATED, ON THEIR  
RELATIVES.

0080 EFFECT OF DIETARY PROTEIN ON PREMATURELY BORN INFANTS, R01 02032-03,  
DAVIDSON, MURRAY, BRONX-LEBANON HOSPITAL CENTER, BRONX, NEW YORK,  
5/68-4/69, RENEWAL \$49,662. NICHD

THIS RESEARCH CONCERNS THE BELIEF THAT ONLY A CORRELATED  
MULTIFACETED APPROACH WILL BE USEFUL TO ESTABLISH THE OPTIMAL  
LEVEL OF PROTEIN IN THE DIET OF PREMATURELY BORN INFANTS.

0090 EFFECT OF MALNUTRITION IN EARLY LIFE R01 02581-08, BARNES,  
RICHARD H., CORNELL UNIVERSITY, ITHACA, NEW YORK, 4/68-3/71, RENEWAL  
\$43,040. NICHD

THIS RESEARCH PROPOSES TO STUDY THE EFFECTS OF MALNUTRITION  
IN EARLY LIFE UPON SUBSEQUENT PHYSICAL AND MENTAL DEVELOPMENT  
IN EXPERIMENTAL ANIMALS (PARTICULARLY RATS AND PIGS).

0100 ENVIRONMENTAL LEAD INTOXICATION IN CHILDREN (R01 01584-04); HARDY,  
HARRIET L., MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE,  
MASSACHUSETTS; 4/68-3/70 (RENEWAL); \$10,228. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE POSSIBLE HAZARD OF  
REPEATED LEAD INTAKE FROM ENVIRONMENTAL SOURCES--THE INTAKE  
TOO LOW TO PRODUCE RECOGNIZABLE LEAD POISONING AT THE TIME.  
THERE IS CONSIDERABLE LITERATURE NOTABLY FROM EUROPE SUGGESTING  
THAT ACUTE AND CHRONIC LEAD INTOXICATION LEADS TO NOT ONLY  
BRAIN DAMAGE BUT IF IT OCCURS IN ADULT FEMALES MAY DAMAGE  
PROGENY.

0110 ENZYME STUDIES IN CULTIVATED FETAL CELLS (R01 02752-02); NADLER,  
HENRY L., NORTHWESTERN UNIVERSITY, EVANSTON, ILLINOIS; 1/68-12/69  
RENEWAL \$22,904. NICHD

THIS RESEARCH PROPOSES TO SHOW THE DELINIATION OF BIOCHEMICAL  
ABNORMALITIES IN FETAL CELLS, POTENTIAL SOURCE OF MATERIAL TO  
STUDY NORMAL AND ALTERNATE METABOLIC PATHWAYS, DIAGNOSIS  
DURING PREGNANCY AND EARLY INSTITUTION OF THERAPY OF THESE  
DISORDERS.

0130 GALACTOSEMIA GENETICS, INCIDENCE AND PATHOPHYSIOLOGY (R01 01974-03);

BEUTLER, ERNEST, CITY OF HOPE MEDICAL CENTER, DUARTE, CALIFORNIA;  
2/68-1/69 RENEWAL \$44,473. NICHD

THIS RESEARCH CONCERNS THE SCREENING FOR GALACTOSE-1-PHOSPHATE URIDYL TRANSFERASE DEFICIENCY AND MUTATION EFFECTING THE ELECTROPHORETIC MOBILITY OF GLUCOSE-6-PHOSPHATE DEHYDROGENASE IN THE OFFSPRING OF MICE BEING TREATED WITH RADIATION OR THE CHEMICAL MUTAGEN ETHYL METHANE SULFONATE. THE CHROMATIC GRAPHIC CHARACTERISTICS OF HUMAN RED CELL GALACTOSE-1-PHOSPHATE URIDYL TRANSFERASE ARE UNDER STUDY.

- 0140 GENETIC FACTORS IN HUMAN SEX DEVELOPMENT (R01 00516-08); MILLER, ORLANDO JACK; 10/67-9/70 RENEWAL \$70,702. NICHD

THIS RESEARCH CONCERNS THE RELATION BETWEEN CHROMOSOMAL ABNORMALITIES AND SEX DIFFERENTIATION; THE ROLE OF CHROMOSOMAL ABNORMALITIES IN INTERSEXUALITY, OTHER DEVELOPMENTAL SEXUAL ABNORMALITIES OR REPRODUCTIVE FAILURE; THE ETIOLOGY OF THESE CHROMOSOMAL ABNORMALITIES; IDENTIFICATION OF INDIVIDUAL CHROMOSOMES MAPPING GENE LOCI TO SPECIFIC CHROMOSOMES; AND USE OF NEW TECHNIQUES TO LEARN MORE ABOUT CELL DIVISION.

- 0150 HASHIMOTO'S STRUMA AND CONGENITAL HYPOTHYROIDISM, R01 00688-11, BEIERWALTES, WILLIAM H., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN, 4/68-3/70, RENEWAL \$33,451. NICHD

THIS RESEARCH CONCERNS: (1) THE STUDY OF LYMPHOID THYROIDITIS (SIMULATING HASHIMOTO'S STRUMA IN THE HUMAN) IN AN INBRED BEAGLE COLONY; AND (2) IN HUMANS, EFFECT OF DIETARY IODINE ON THE INCIDENCE OF HASHIMOTO'S THYROIDITIS AND THE INCIDENCE OF LOW THYROID RESERVE FROM HASHIMOTO'S THYROIDITIS IN MOTHERS OF CRETINS AND MOTHERS WITH DEMONSTRABLE CIRCULATING ANTIBODIES WITH NO CRETINOUS OFFSPRING.

- 0155 IMMEDIATE AND LONG-TERM EFFECTS OF ASPHYXIA NEONATORUM P01 03417-01, WINDLE, WILLIAM F., NEW YORK UNIVERSITY, N.Y., 3/68-2/71, INITIAL, \$132,750. NICHD

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE ROLE OF ASPHYXIA NEONATORUM AS IT ADVERSLY AFFECTS STRUCTURE AND FUNCTION OF THE INDIVIDUAL. WAYS WILL BE SOUGHT TO PREVENT AND REDUCE SUCH CHANGES.

- 0160 INHERITANCE OF RED CELL AND PROTEIN FACTORS IN FAMILIES (R01 02791-02); DIAMOND, LOUIS K., BLOOD GROUPING LABORATORY OF BOSTON, BOSTON, MASS., 12/67-11/68, RENEWAL, \$45,006. NICHD

THIS RESEARCH IS A CONTINUATION OF A PROJECT FORMERLY ENTITLED "AN IMMUNOGENETIC STUDY IN THE MATERNAL AND INFANT HEALTH PROGRAMS AT THE BOSTON LYING-IN HOSPITAL" IN ORDER TO COMPLETE THE STUDY OF THE BLOOD GROUP FACTORS OF BOTH BLOOD CELLS AND PLASMA PROTEINS IN MORE THAN 1500 COMPLETE FAMILIES, COLLECTED OVER THE LAST 5 YEARS.

- 0165 INHERITED CYTOGENETIC DEFECTS IN SPONTANEOUS ABORTION R01 03324-01, BYRD, JEROME R., MEDICAL COLLEGE OF GEORGIA, AUGUSTA, GA., 6/68-5/71, INITIAL, \$25,279. NICHD

THIS RESEARCH WILL INVESTIGATE CLINICALLY AND CYTOGENETICALLY COUPLES WITH HISTORIES OF MULTIPLE SPONTANEOUS ABORTIONS. CHROMOSOMAL DEFECTS AND PATTERNS AND MECHANISMS OF INHERITANCE OF DEFECTS WILL BE STUDIED.

- 0170 MENTAL RETARDATION CLINICAL RESEARCH CENTER (P02 00370-07); KUGEL, ROBERT, UNIVERSITY OF NEBRASKA, OMAHA, NEBRASKA; 10/67-9/68 (RENEWAL); \$414,386. (NICHD)

THIS RESEARCH CONCERNS PROVISION OF A FACILITY TO PROMOTE CLINICAL RESEARCH FOR DETERMINATION OF THE CAUSES, CLARIFICATION OF DIAGNOSIS, AND DEVELOPMENT OF MORE USEFUL TECHNIQUES AND PROCEDURES FOR THE PREVENTION AND TREATMENT OF MENTAL RETARDATION, AND PROVISION OF A SETTING FOR TEACHING AND TRAINING OF PERTINENT DISCIPLINES AT THE UNDERGRADUATE, GRADUATE, AND POSTGRADUATE LEVELS.

- 0175 NEURAL DEFECTS IN VERATRUM-INDUCED CYCLOPIA R01 03499-01, YOUNG, STUART, COLORADO STATE UNIVERSITY, FORT COLLINS, COLO., 6/68-5/69, INITIAL, \$4,513. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE CHARACTER OF MORPHOLOGIC ABERRATIONS THAT OCCUR IN OVINE FETUSES AND NEONATES RESULTING FROM PER-ORAL ADMINISTRATION OF THE PLANT VERATRUM CALIFORNICUM.

- 0180 NEUROLOGICAL DEVELOPMENT--INFANTS OF DIABETIC MOTHERS (R01 01813-07); HUBBELL, JOHN P., JR., BOSTON HOSPITAL FOR WOMEN, BOSTON, MASS.; 6/68-5/72 (RENEWAL); \$15,169. (NICHD)

THIS RESEARCH INVOLVES THE COLLECTION OF DATA DURING PREGNANCY, LABOR AND DELIVERY OF PREGNANT WOMEN WITH DIABETES. THE INFANTS AFTER BIRTH ARE EXAMINED AND FOLLOWED IN ACCORDANCE WITH THE PROTOCOL OF THE COLLABORATIVE NEONATAL STUDY OF THE

NINDB. THE ULTIMATE AIM IS TO DETERMINE THE LONG-RANGE NEURO-LOGIC OUTCOME IN 500 LIVE-BORN INFANTS AND TO TRY TO CORRELATE OUTCOME WITH EVENTS DURING THE PERINATAL PERIOD.

- 0183 NUTRITION AND DEVELOPMENT OF CHILDREN IN RURAL AREAS R22 03942-01, CHAVEZ, ADOLFE, INSTITUTO NACIONAL DE LA NUTRI, MEXICO, D.F., MEXICO, 5/68-4/71, INITIAL, \$25,239. NICHD

THIS RESEARCH WILL MEASURE, LONGITUDINALLY, FOOD AND NUTRIENT CONSUMPTION IN CHILDREN FROM BIRTH TO 3 YEARS OF AGE. THIS DATA WILL BE CORRELATED WITH GROWTH, MATURATION AND HEALTH. QUANTITATIVE FEEDING PRACTICES FOR INFANTS AT VARIOUS AGES WILL BE DEFINED.

- 0185 NUTRITION, CELL FUNCTION AND GROWTH RETARDATION R22 02912-01, METCOFF, JACK, MICHAEL REESE HOSPITAL AND MEDICAL CENTER, CHICAGO, ILL., 3/68-2/71 INITIAL, \$41,624. NICHD

THIS RESEARCH WILL COMPARE HUMAN FETAL MALNUTRITION WITH POSTNATAL MALNUTRITION AND THE EFFECTS OF NUTRITION ON BIOCHEMICAL ASPECTS OF GROWTH AND DEVELOPMENT.

- 0195 PERSISTENT CONGENITAL AND NEONATAL VIRUS INFECTIONS R01 02906-01, LANG, DAVID J., MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS., 8/67-7/70, INITIAL, \$44,006. NICHD

THIS STUDY WILL INVESTIGATE CONGENITAL AND NEONATAL VIRUS INFECTIONS AND THEIR RELATIONSHIP TO CONGENITAL STRUCTURE AND FUNCTIONAL ABNORMALITIES.

- 0220 RED CELL AND SERUM FACTORS AS GENE MARKERS IN CHILDREN (R01 02723-02); DIAMOND, LOUIS K., BLOOD GROUPING LABORATORY OF BOSTON, INC., BOSTON, MASS.; 12/67-11/69. RENEWAL \$46,152. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE LOCATION OF STRUCTURAL AND/OR REFRACTORY GENES ON HUMAN AUTOSOMES USING 30 OR MORE RED CELL AGGLUTINOGENS AND 10 OR MORE PLASMA PROTEIN TYPES. THE BLOOD SAMPLES WILL BE OBTAINED FROM PATIENTS WITH CHROMOSOMAL ABERRATIONS CHARACTERIZED BY EITHER EXTRA OR DEFICIENT CHROMOSOMAL MATERIAL.

- 0230 STRUCTURAL AND DEVELOPMENTAL GENES IN CHILDREN (R01 02724-02); GERALD, PARKS., CHILDREN'S HOSPITAL MEDICAL CENTER, BOSTON, MASS.; 1/68-12/69 (RENEWAL ; \$33,605. (NICHD)

THIS RESEARCH PROPOSES TO DETERMINE THE ORGANIZATION OF GENES (BOTH STRUCTURAL AND "DEVELOPMENTAL" GENES) ON THE HUMAN CHROMOSOMES, SPECIFICALLY THE CORRELATION OF INDIVIDUAL GENETIC LOCI (AND LINKAGE GROUPS) WITH THE MORPHOLOGICALLY IDENTIFIABLE CHROMOSOMES TO WHICH THEY ARE LINKED.

- 0240 STUDIES ON THE MECHANISMS OF INFECTIOUS TERATOGENESIS (R01 01687-03); ALFORD, CHARLES A., UNIVERSITY OF ALABAMA, BIRMINGHAM, ALABAMA; 9/67-8/68 (RENEWAL); \$23,876. (NICHD)

THIS RESEARCH PROPOSES TO INVESTIGATE THE VIRAL-HOST RELATIONS IN CONGENITAL INFECTIONS THAT RESULT IN THE DISRUPTION OF EMBRYOGENESIS IN MAN (WITH SPECIAL REFERENCE TO RUBELLA AND CYTOMEGALOVIRUS).

- 0255 TERATOLOGICAL STUDIES WITH INBRED MICE R0103502-01A1, KALTER, HAROLD, CHILDRENS HOSP, CINCINNATI, OHIO, 5/68-4/71, INITIAL, \$24,114. NICHD

THIS STUDY IS CONCERNED WITH EXTRINSICALLY INDUCED AND SPONTANEOUS MALFORMATIONS IN MICE. HEREDITARY AND NON-HEREDITARY FACTORS OF SUSCEPTIBILITY WILL BE INVESTIGATED.

- 0270 TRANSFER OF VIRAL INFECTIONS ACROSS THE PLACENTA (R01 02289-02); HILDEBRANDT, RICHARD J., UNIVERSITY OF FLORIDA, GAINESVILLE, FLA.; 7/67-6/69, RENEWAL, \$31,466. NICHD

THIS RESEARCH FOCUSES ON THE TRANSFER OF CYTOMEGALOVIRUS ACROSS THE PLACENTA IN VARIOUS SPECIES OF MAMMALS, USING VIROLOGIC TECHNIQUES WHICH ARE BEING USED IN THE LABORATORY OF THE SECTION ON INFECTIOUS DISEASES. EVIDENCE HAS IMPLICATED THIS VIRUS IN INFECTIONS OF BOTH THE FETUS AND THE NEWBORN.

- 0300 INTELLECTUAL DEVELOPMENT AND ORPHANAGE EXPERIENCE (MH-10226-02); HUNT, J. MCVICKER, UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS; 9/68 (RENEWAL); \$13,065. (NIMH)

THIS RESEARCH CONCERNS WHETHER INCREASING THE VARIABILITY OF AUDITORY AND VISUAL INPUT DURING THE FIRST YEAR DECREASES THE DEGREE TO WHICH INFANTS IN AN ORPHANAGE ARE RETARDED, AND WHETHER ADOLESCENTS RAISED IN THE SAME ORPHANAGE SETTING SHOW GREATER INTELLECTUAL DEFECTS THAN FAMILY-REARED CHILDREN.

- 0310 INTELLECTUAL STIMULATION OF CULTURALLY DEPRIVED INFANTS (MH-9224-02);

FURFEY, PAUL H., CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C.; 9/68 (RENEWAL); \$101,769. (NIMH)

THIS RESEARCH PROPOSES TO STUDY 2 GROUPS OF CULTURALLY DEPRIVED, MALE, NEGRO INFANTS. AT THE AGE OF 14 MONTHS THEY ARE TESTED FOR INTELLIGENCE ON THE BAYLEY SCALES. INFANTS IN 1 GROUP ARE VISITED BY STAFF MEMBERS (CALLED "TUTORS") FOR 1 HOUR A DAY, 5 DAYS A WEEK. THE SECOND GROUP IS NOT VISITED BY TUTORS. AT 21, 27, AND 36 MONTHS, SUBJECTS IN BOTH GROUPS ARE RETESTED TO SEE WHETHER THE TUTORED INFANTS SHOW MORE INTELLECTUAL PROGRESS THAN UNTUTORED.

- 0320 SOCIAL-CULTURAL ASPECTS OF MENTAL RETARDATION (MH-9237-01); HAYWOOD, CARL H., GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENN.; 6/68 (RENEWAL); \$2,549. (NIMH)

THIS INTERNATIONAL CONFERENCE SCHEDULED IN APRIL 1968 AT GEORGE PEABODY COLLEGE CONSISTS OF PAPERS AND DISCUSSIONS OF ADVANCES IN IDENTIFYING SOCIAL-CULTURAL FACTORS OF MENTAL RETARDATION, QUALITIES OF EARLY EXPERIENCE AND INTELLECTUAL DEVELOPMENT, UN-OR POORLY-EXPLORED AREAS WITHIN THE TOPIC, AND CONCEPTUAL SYSTEMS TO ENCOMPASS EXISTING DATA.

- 0330 THE GROWTH OF COGNITIVE ABILITIES IN YOUNG CHILDREN (MH-8498-03); BLANK, MARION S., YESHIVA UNIVERSITY COLLEGE OF MEDICINE, NEW YORK, N.Y.; 1/68 (RENEWAL); \$3,543. (NIMH)

THIS RESEARCH PROPOSES TO INVESTIGATE THE ROLE OF CONCEPTS IN PROBLEM SOLVING IN NURSERY SCHOOL AGE CHILDREN.

- 0340 ALTERING BILIRUBIN METABOLISM AND KERNICTERUS BY DRUGS (4925-05); SPRATT, JAMES L., STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA; 9/67-8/68 (RENEWAL); \$21,761. (NINDS)

THIS RESEARCH CONCERNS ATTEMPTS TO CAUSE STIMULATION OF BILIRUBIN CONJUGATION BY GLUCURONYL TRANSFERASE. THE STUDIES WILL BE PERFORMED WITH NEWBORN ANIMALS AND BOTH IN VIVO AND IN VITRO TECHNIQUES WILL BE UTILIZED.

- 0343 ATYPICAL HUMAN PLASMA CHOLINESTERASE, 5541-05, SMITH, J. CRISPIN, MONTEFIORE HOSPITAL AND MEDICAL CENTER, BRONX, N.Y., 9/68-8/69, RENEWAL, \$20,736. NINDS

THIS RESEARCH WILL EXAMINE THE DIFFERENCE BETWEEN NORMAL HUMAN PLASMA CHOLINESTERASE AND THE KNOWN VARIANTS OF THIS ENZYME.

IMPROVEMENT OF CURRENT IDENTIFICATION METHODS AND THE DEVELOPMENT OF A SIMPLE, PRECISE DETECTION PROCEDURE WILL BE ATTEMPTED.

- 0348 BIOSYNTHESIS AND METABOLISM OF GALACTOLIPIDS, 1575-11, BURTON, ROBERT M., WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS, MO., 4/68-3/69, RENEWAL, \$28,680. NINDR

THIS RESEARCH WILL STUDY METABOLIC PATHWAYS CONCERNING GALACTOLIPIDS THROUGH THE ISOLATION AND CHARACTERIZATION OF INDIVIDUAL ENZYME ACTIVITIES.

- 0350 BRAIN DAMAGE AND HYPEROXYGENATION IN MENTAL DEFICIT (7258-01); HARRIS, JOSEPH., BARROW NEUROLOGICAL INSTITUTE OF ST. JOSEPH'S HOSPITAL PHOENIX, ARIZONA, 6/67-5/69 INITIAL, \$25,187. NINDB

THIS RESEARCH PROPOSES TO ESTABLISH THE PARAMETERS INVOLVED IN THE PRODUCTION OF BRAIN DAMAGE BY EXPOSURE OF NEWBORN RATS TO HIGH CONCENTRATIONS OF O<sub>2</sub> DURING THE FIRST FEW DAYS OF LIFE.

- 0361 BRAIN LIPIDS IN DIFFUSE DEMYELINATIVE DISEASES, 2672-09, MOSER, HUGO W., MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS., 6/68-5/69, RENEWAL, \$45,150. NINDB

THIS RESEARCH WILL STUDY THE TURNOVER OF SULFATED POLYSACCHARIDES, STEROID SULPHATES AND SULFATIDES IN PATIENTS WITH METACHROMATIC LEUKODYSTROPHY, AND IN INDIVIDUALS WITH OTHER TYPES OF RETARDATION. DISORDERS OF AMINO ACID METABOLISM WILL ALSO BE STUDIED.

- 0370 BRAIN METABOLISM AND SYSTEMIC DISEASE (1365-11); BESSMAN, SAMUEL P., UNIVERSITY OF MARYLAND, SCHOOL OF MEDICINE, BALTIMORE, MD., 9/67-8/68 RENEWAL, \$44,659. NINDR

THIS RESEARCH PROPOSES TO INVESTIGATE CERTAIN DISEASES ACCOMPANIED BY CENTRAL NERVOUS SYSTEM SIGNS AND SYMPTOMS, INCLUDING MENTAL RETARDATION, LIVER DISEASE, RENAL DISEASE, AND ACUTE INFECTIONS.

- 0380 BRAIN PROTEIN SYNTHESIS IN RELATION TO MENTAL RETARDATION (7906-01); RENDINA, GEORGE 9/1/67-4/20/69 BOWLING GREEN STATE UNIVERSITY, BOWLING GREEN, OHIO INITIAL, \$50,169. NINDR

THIS RESEARCH CONCERNS THE GENERALIZATION THAT ALL TYPES OF RETARDATION RESULT FROM SOME MALFUNCTION OF THE DNA-RNA

MATERIAL IN THE CELL AND THIS IS A GUIDE FOR INVESTIGATIVE ACTIVITY.

- 0385 CHROMOSOMAL ABNORMALITIES AND LOCALIZATION OF GENES, 6390-03, DOXIADIS, S.A., AGHIA SOPHIA CHILDREN'S HOSPITAL, ATHENS, GREECE, 1/68-12/68, RENEWAL, \$17,850. NINDB

THIS RESEARCH CONDUCTS CHROMOSOMAL STUDIES ON ALL NEWBORN AT UNIVERSITY MATERNITY HOSPITAL IN ATHENS, GREECE WHERE AMNION SEXING WAS PERFORMED. HEMATOLOGICAL AND BIOCHEMICAL INVESTIGATIONS ARE CONDUCTED TO ATTEMPT GENE LOCALIZATION.

- 0415 CONGENITAL CATARACTS AND ASSOCIATED ANOMALIES, 7223-02, MARCUS, LEONARD C., ALBERT EINSTEIN COLLEGE OF MEDICINE, YESHIVA UNIVERSITY, BRONX, N.Y., 5/68-4/69, RENEWAL, \$8,977. NINDB

THIS RESEARCH PROPOSES TO STUDY THE GENETIC AND PATHOPHYSIOLOGICAL BASIS OF CONGENITAL CATARACTS IN ENGLISH COCKER SPANIELS AND BEAGLES.

- 0420 CYSTATHIONINE METABOLISM IN BRAIN (4454-06); BROWN, FOUNTAINE CHRISTINA, UNIVERSITY OF TENNESSEE, MEMPHIS, TENN.; 9/68-8/69 (RENEWAL); \$10,883. (NINDB)

THIS RESEARCH PROPOSES TO DELVE INTO THE METABOLISM OF SULFUR CONTAINING COMPOUNDS BY BRAIN TISSUE. THE STUDY WILL ENCOMPASS ENZYMES AND CO-FACTORS PERTINENT TO METABOLIC SYNTHESIS AND DEGRADATION OF SULFUR COMPOUNDS, WITH PARTICULAR EMPHASIS ON CYSTATHIONINE, ITS PRECURSORS, AND DERIVATIVES.

- 0425 CYTOGENESIS OF EMBRYONIC HUMAN CENTRAL NERVOUS SYSTEM, 7053-02, SIDMAN, RICHARD L., HARVARD MEDICAL SCHOOL, BOSTON, MASS., 9/68-8/69, RENEWAL, \$21,477. NINDB

THE PURPOSE OF THIS RESEARCH IS TO ANALYZE NORMAL AND ABNORMAL MECHANISMS OF CELL DEVELOPMENT IN THE EMBRYONIC HUMAN NERVOUS SYSTEM, AUTORADIOGRAPHY AND ELECTRON MICROSCOPY WILL BE USED IN THE ANALYSIS.

- 0430 DEVELOPMENTAL NERVOUS DISORDERS; KRABBE'S DISEASE (6756-02); FLETCHER, T.F., UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.; 2/68-1/69 RENEWAL, \$19,859. NINDB

THIS RESEARCH CONCERNS THE STUDY OF KRABBE TYPE LEUKODYSTROPHY



IN THE DOG, INCLUDING THE GENETIC BASIS OF TRANSMISSION, THE FUNCTIONAL STATUS OF THE PATIENT AT DIFFERENT STAGES IN THE PATHOGENESIS OF THE DISEASE, AND THE EFFECT OF DRUGS ON THE COURSE OF THE DISEASE.

- 0440 DIRECT AND INDIRECT CALORIMETRY IN NEWBORNS (4831-04); ANDERSON, JOHN A., UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.; 9/67-8/68 (RENEWAL); \$21,986. (NINDB)

THIS RESEARCH PROPOSES TO INVESTIGATE THE ENERGY METABOLISM OF HUMAN NEWBORNS BY SIMULTANEOUS DIRECT AND INDIRECT CALORIMETRY. THE RATIO OF OXYGEN CONSUMPTION TO HEAT PRODUCTION WILL BE DETERMINED FOR NORMAL INFANTS DURING THE FIRST WEEK OF LIFE AND WILL BE COMPARED WITH THOSE OBTAINED ON NEONATES WHO HAVE RESPIRATORY DISTRESS, HYPERBILIRUBINEMIA, PRE-MATURITY OR ARE UNDER THE EFFECT OF DRUGS.

- 0450 EFFECT OF DIET ON LIPIDS AND AMINO ACIDS OF BRAIN (5262-03 MERTZ, EDWIN T., PURDUE UNIVERSITY, LAFAYETTE, INDIANA; 5/66-11/67 (RENEWAL); \$2,598. (NINDB)

THIS RESEARCH PROPOSES TO FIND THE WAYS THE BRAIN OF THE IMMATURE RAT IS ALTERED WITH RESPECT TO LEVELS OF LIPIDS, TOTAL PROTEIN AND FREE AMINO ACIDS BY LIMITED FOOD INTAKE, BY LOW OR IMBALANCED PROTEIN DIETS AND BY DIETS SUPPLEMENTED WITH VERY HIGH LEVELS OF PHENYLALANINE.

- 0460 EFFECTS OF ANOXIA ON BRAIN METABOLISM IN THE NEWBORN (6163-02); THURSTON, JEAN H., WASHINGTON UNIVERSITY MEDICAL SCHOOL, ST. LOUIS, MISSOURI; 10/67-9/68, RENEWAL); \$29,050. (NINDB)

THIS RESEARCH PROPOSES TO STUDY BIOCHEMICAL EFFECTS OF ANOXIA ON THE BRAIN OF THE NEWBORN FETUS. SUBSTRATES OF KNOWN IMPORTANCE IN BRAIN METABOLISM WILL BE MEASURED AT ZERO TIME AND AFTER VARYING DEGREES OF ANOXIA, WITH THE AIM OF CORRELATING THE FINDINGS WITH FUNCTIONING OF THE BRAIN AS MIGHT RELATE TO SUBSEQUENT DEVELOPMENT.

- 0470 ENERGY SUPPLY DISORDERS AFFECTING THE FETAL-INFANTILE CNS 2275-09 PENTSCHEW, ANGEL, CENTRAL ANATOMIC LABORATORY, MARYLAND MEDICAL-LEGAL FOUNDATION, BALTIMORE, MARYLAND 9/67-8/68 RENEWAL \$53,037. NINDB

THIS RESEARCH PROPOSES FURTHER EXPLORATION OF RECENT EXPERIMENTAL FINDINGS SUGGESTING THAT CHRONIC METABOLIC HYPOXIDOSIS ABOLISHES THE INHERENT SPECIFIC SKILL OF THE CEREBRAL

CAPILLARIES TO FUNCTION AS BLOOD-TISSUE BARRIER AND REDUCES THEIR FUNCTIONAL ABILITY TO THAT OF COMMON CAPILLARIES.

- 0480 ENZYMATIC FORMATION OF BILE PIGMENTS (5367-04); LEVIN, EPHRAIM Y., JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, BALTIMORE , MARYLAND; 9/67-8/68 (RENEWAL); \$14,883. (NINDB)

THIS RESEARCH CONCERNS THE MECHANISM OF HEME RING CLEAVAGE IN THE PRESENCE OF VARIOUS REDUCING AGENTS SUCH AS ASCORBIC ACID; THE NATURE OF VERDOHEMOCHROME, THE INTERMEDIATE REACTION PRODUCT; AND THE RELATIONSHIP OF THIS MODERATED REACTION TO HEME RING CLEAVAGE IN THE PRESENCE OF LIVER EXTRACTS.

- 0490 ENZYME ACTIVITY IN BRAINS 7360-01 LAMBOOY, JOHN P., UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE, OMAHA, NEBRASKA 5/67-4/69 INITIAL \$17,099 NINDB

THIS RESEARCH PROPOSES TO STUDY THE RELATIONSHIP BETWEEN THE HALF-LIFE OF THE MITOCHONDRIA OF THE BRAIN AND THE FLAVIN CONTENT OF THE MITOCHONDRIA. THE FLAVIN CONTENT WILL BE EXPRESSED AS THE SUCCINIC DEHYDROGENASE ACTIVITY OF THE BRAINS OF INFANT RATS WHOSE BIOCHEMICALLY FUNCTIONAL FLAVIN WILL DEPEND ON THE COMPOSITION OF THE FLAVIN COMPONENT OF THEIR DIET.

- 0500 EXPERIMENTAL MODEL OF PHENYLKETONURIA-LIKE CONDITIONS (6905-02); LISS, LEOPOLD, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO; 2/62/68-1/69 RENEWAL \$30,293. NINDB

THIS RESEARCH PROPOSES TO INVESTIGATE THE MECHANISMS WHICH CAUSE MENTAL RETARDATION IN ACCUMULATION DISEASES.

- 0510 FACTORS INFLUENCING NEURAL TUBE DIFFERENTIATION (6367-03); LYSER, KATHERINE M., HUNTER COLLEGE OF THE CITY UNIVERSITY OF NEW YORK, NEW YORK, N.Y., 12/67-11/68 RENEWAL \$8,618. NINDB

THIS RESEARCH FOCUSES UPON FACTORS CONTROLLING DEVELOPMENT IN THE CHICK EMBRYO SPINAL CORD, BEGINNING AT THE TIME OF INITIAL DIFFERENTIATION OF NEUROBLAST CELLS AND NERVE PROCESSES BEING STUDIED IN ORGAN CULTURE.

- 0520 FUNCTIONAL ANALYSIS OF THE HUMAN SKULL (965-13); MOSS, MELVIN L., COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK, N.Y. 4/68-3/69 RENEWAL \$8,749. NINDB

THIS RESEARCH PROPOSES TO CONTINUE STUDY OF THE FORM AND STRUCTURE OF THE HUMAN SKULL BY THE PREVIOUSLY ESTABLISHED METHODS OF FUNCTIONAL CRANIAL ANALYSIS; THE ISOLATION OF FUNCTIONAL CRANIAL COMPONENTS, THE IDENTIFICATION OF THEIR RESPECTIVE SKELETAL UNITS AND RELATED FUNCTIONAL MATRICES.

- 0523    GANGLIOSIDES IN WHITE MATTER AND IN MYELIN, 7944-01, SUZUKI, KUNIHICO, ALBERT EINSTEIN COLLEGE OF MEDICINE, YESHIVA UNIVERSITY, BRONX, N.Y., 5/68-4/69, INITIAL, \$30,435. NINDB

THIS RESEARCH WILL ATTEMPT TO CLARIFY THE LOCALIZATION AND NATURE OF THE GANGLIOSIDE RECOVERED IN THE MYELIN FRACTION. ISOLATION AND CHARACTERIZATION OF MYELIN FROM BRAINS WITH TAY-SACHS DISEASE WILL BE DONE.

- 0525    GENETIC STUDIES OF TAPETO-RETINAL DEGENERATIONS, 4590-05, KLEIN, DAVID, INSTITUT UNIVERSITAIRE DE GENETIQUE MEDICALE, GENEVA, SWITZERLAND, 11/67-5/69, RENEWAL, \$7,250. NINDB

THIS RESEARCH INVESTIGATES THE ASSOCIATION OF TAPETO-RETINAL DEGENERATIONS WITH HEREDITARY DISORDERS SUCH AS NIEMAN-PICK DISEASE AND FAMILIAL AMAUROTIC IDIOCY. BIOCHEMICAL AND BLOOD EXAMINATIONS OF AFFECTED FAMILIES WILL BE MADE.

- 0550    IMMUNOCHEMICAL STUDIES OF NEURAL DIFFERENTIATION (7141-03); FRIEDMAN, HARVEY P., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS; 9/68-8/69 RENEWAL \$11,530. NINDB

THIS RESEARCH PROPOSES TO CONTINUE WORK ON THE CHEMICAL FRACTIONATION OF CHICKEN BRAIN ANTIGENS AND THE ISOLATION OF ANTIBODIES THERETO, SO THAT THE ANTIGEN INVOLVED IN THE PROCESS OF DIFFERENTIATION MAY BE DISTINGUISHED FROM THOSE WHICH ARE PRESENT BEFORE THE CELL ASSUMES ITS DEFINITIVE NATURE.

- 0560    INHIBITION ASSAY - DETECTION AND STUDY OF INBORN ERRORS, 5290-05, GUTHRIE, ROBERT, RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK, ALBANY, N.Y. 4/68-3/69 RENEWAL \$48,074-05 NINDB

THIS RESEARCH CONCERNS "MULTIPLE" MICROBIOLOGICAL TESTS AND A "MULTIPLE INHIBITION ASSAY" FOR DETECTION OF INBORN ERRORS IN THE NEWBORN INFANT. A POSSIBLE NEW INBORN ERROR ASSOCIATED WITH SEVERE MENTAL RETARDATION AND RELATED TO HISTIDINEMIA HAS BEEN DISCOVERED.

- 0570    LP AND ASSOCIATED MUTATIONS (684-14); STEIN, KATHRYN F., MOUNT

HOLYOKE COLLEGE, SOUTH HADLEY, MASSACHUSETTS; 10/67-9/69 (RENEWAL); \$12,360. (NINDB)

THIS RESEARCH CONCERNS THE MUTATION LP IN THE MOUSE, WHICH IN HOMOZYGOUS EMBRYOS PREVENTS CLOSURE OF THE NEURAL FOLDS, AND SEVERAL ASSOCIATED MUTATIONS.

- 0580 MALFORMATIONS OF THE NERVOUS SYSTEM (6188-03); LANGMAN, JAN, UNIVERSITY OF VIRGINIA, SCHOOL OF MEDICINE CHARLOTTESVILLE, VIRGINIA 9/67-8/68 RENEWAL \$32,939 NINDB

THIS RESEARCH PROPOSES TO DETERMINE WHETHER VITAMIN A IN VITRO INHIBITS CELL DIVISION, WHAT IS THE PRECISE LOCALIZATION OF VITAMIN A IN THE CELL, AND WHETHER VITAMIN A INFLUENCES THE NORMAL DIFFERENTIATION OF THE NEUROBLASTS OR WHETHER IT INTERFERES WITH CELL PROLIFERATION. ALSO TO BE EXAMINED IS WHETHER LABELED CELLS PENETRATE INTO THE CENTRAL NERVOUS SYSTEM OF THE UNLABELED EMBRYO AND WHETHER NEUROBLASTS ARE CHARACTERIZED BY A SPECIFIC PROTEIN.

- 0583 MENTAL RETARDATION CONFERENCE ON PHYSICAL TRAUMA, PH 43-68-700, ANGLE, CAROL, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR., 4/68-3/69. INITIAL, \$28,000. NINDB CONTRACT

NO ABSTRACT

- 0590 METABOLIC DISEASES OF THE BRAIN 6938-03 MENKES, JOHN H., UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF. 4/68-3/69 RENEWAL \$77,758. NINDB

THIS RESEARCH PROPOSES TO INVESTIGATE THE INTERRELATION BETWEEN THE METABOLIC DEFECT IN VARIOUS INBORN ERRORS OF METABOLISM AND THE DEVELOPMENT OF NEUROLOGIC ABNORMALITIES.

- 0600 METABOLISM OF GAMMA-HYDROXYBUTYRIC ACID (5062-04); BESSMAN, SAMUEL P., FRIENDS OF PSYCHIATRIC RESEARCH, INC., BALTIMORE, MARYLAND; 9/67-8/68 (RENEWAL); \$31,373. (NINDB)

THIS RESEARCH CONCERNS THE METABOLISM OF GAMMA-HYDROXYBUTYRATE AND ITS LACTONE IN ANIMALS AND IN HUMANS. AN ENZYME WHICH HYDROLYZES THE LACTONE HAS BEEN ISOLATED AND PURIFIED TO SOME EXTENT AND ITS PROPERTIES ARE UNDER INVESTIGATION. THIS ENZYME HAS BEEN SHOWN TO REVERSIBLY CATALYZE THE CONVERSION OF GAMMA-HYDROXYBUTYRATE TO ITS LACTONE.

- 0603 METABOLISM OF THE SPHINGOLIPIDS AND C24 FATTY ACIDS, 2967-08,

GATT, S., HEBREW UNIVERSITY-HADASSAH MEDICAL SCHOOL, JERUSALEM, ISRAEL, 4/68-3/69, RENEWAL, \$30,350. NINDB

THIS RESEARCH STUDIES: 1. MECHANISM OF ACTION OF CERAMIDASE.  
2. MECHANISM OF THE DEGRADATION OF SPHINGOSINE BASES TO FATTY ACIDS.  
3. THE ENZYMATIC DEFECT IN TAY-SACHS DISEASE.

0605 MINIMAL BRAIN DYSFUNCTION, PH 43-67-61,  
CHALFANT, JAMES C., UNIVERSITY OF ILLINOIS, URBANA, ILL.,  
7/68-8/68, RENEWAL, \$4,900. NINDB CONTRACT

NO ABSTRACT

0610 MUCOPOLYSACCHARIDES IN NEUROLOGICAL DISORDERS (5947-03); RENUART,  
ADHEMAR W., MURDOCH CENTER, BUTNER, NORTH CAROLINA; 5/67-12/68 RENEWAL  
ADHEMAR W., MURDOCH CENTER, BUTNER, NORTH CAROLINA; 5/67-12/68, RENEWAL,  
\$19,959. (NINDB)

THIS RESEARCH PROPOSES TO ELUCIDATE THE ENZYME SYSTEM FOR THE  
DEGRADATION OF ACID MUCOPOLYSACCHARIDES. AS SHOWN BY OTHERS,  
HYALURONIDASE IS ASSOCIATED MAINLY WITH THE LYSOSOMAL FRACTION  
OF CELLS. THE SEARCH IS CONTINUING FOR A SYSTEM IN ANIMAL  
TISSUES FOR DEGRADING SULFATED MUCOPOLYSACCHARIDES.

0640 NEW AMINO ACID DISORDERS IN CEREBRAL DISEASE, 5096-05 SHIH, VIVIAN E.,  
MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS. 1/68-12/68 RENEWAL  
\$67,725. NINDB

THIS RESEARCH INVOLVES THE INVESTIGATION OF ENZYME BIOCHEMICAL  
DEFECTS IN SEVERAL PREVIOUSLY UNDESCRIBED INBORN ERRORS OF  
AMINO ACID METABOLISM ASSOCIATED WITH AMMONIA INTOXICATION,  
MENTAL RETARDATION, AND OTHER EVIDENCE OF CEREBRAL DISEASE.

0650 ONTOGENESIS OF ACTIVITY IN CEREBRAL NEURONS (7105-02); HUTTENLOCHER,  
PETER R., YALE UNIVERSITY SCHOOL OF MEDICINE, NEW HAVEN, CONN.,  
7/67-8/68 RENEWAL \$18,867. NINDB

THIS RESEARCH CONCERNS THE DEVELOPMENT OF NEURONAL ACTIVITY  
IN IMMATURE MAMMALIAN CEREBRAL CORTEX. IT IS HOPED TO  
EVENTUALLY CORRELATE DEVELOPMENT OF NEURONAL FUNCTIONING  
WITH ANATOMICAL DEVELOPMENT OF CORTEX, AND WITH BIOCHEMICAL  
CHANGES OBSERVED DURING MATURATION OF THE BRAIN.

0680 PHENYLALANINE ANTIMETABOLITE EFFECT ON NERVOUS SYSTEM (6903-02);

WATT, DEAN D., MIDWEST RESEARCH INSTITUTE, KANSAS CITY, MO.;  
2/68-1/69 RENEWAL \$26,698. NINDR

THIS RESEARCH REPRESENTS A STUDY OF THE EFFECTS OF ANTIMETABOLITES OF PHENYLALANINE UPON THE NERVOUS SYSTEM, WITH EMPHASIS UPON THE DEVELOPING NERVOUS SYSTEM. THE COMPOUNDS TO BE STUDIED ARE DL-4-FLUOROPHENYLALANINE, DL-4-CHLOROPHENYLALANINE, DL-4-METHYLPHENYLALANINE AND 3-(4-PYRIDYL)-ALANINE (TOLYL-ALANINE).

- 0690 PHOSPHOETHANOLAMINE METABOLISM IN DEVELOPING BRAIN (6113-03); COHEN, MAYNARD M., PRESBYTERIAN-ST. LUKE'S HOSPITAL, CHICAGO, ILL.; 9/67-8/68 (RENEWAL); \$11,760. (NINDR)

THIS RESEARCH CONCERNS STUDIES TO DETERMINE IF PHOSPHOETHANOLAMINE ENTERS METABOLISM AS A UNIT OR IS FIRST HYDROLYZED TO ETHANOLAMINE TO SERVE AS A PRECURSOR. INFORMATION ON THIS WILL BE OBTAINED BY UTILIZING C14 CHOLINE WITH SUBSEQUENT ISOLATION OF LECITHIN AND SPHINGOMYELIN.

- 0700 PHYLOGENY AND ONTOGENY OF THE CEREBRAL CORTEX (3473-06); NOBACK, CHARLES R., COLUMBIA UNIVERSITY, COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK, N.Y. 9/67-8/68 RENEWAL \$18,808. (NINDR)

THIS RESEARCH CONCERNS THE STUDY OF NEURONS OF THE CEREBRAL CORTEX (STAINED BY THE GOLGI TECHNIQUE) IN A SERIES OF MAMMALS INCLUDING TUPAIA AND OPOSSUM. FROM THESE OBSERVATIONS THE PHYLOGENY OF THESE CELLS WILL BE CONSTRUCTED. THE COMPARATIVE MORPHOLOGY OF THE CORTICORETICULAR AND CORTICOSPINAL FIBERS AND VISUAL PATHWAYS TO THE CORTEX ARE BEING STUDIED IN TUPAIA GLIS AND SOME LOWER PRIMATES.

- 0703 PLANNING GRANT: STUDY OF NEONATAL HYPERBILIRUBINEMIA, 7936-01, DRORBAUGH, JAMES E., CHILDREN'S HOSPITAL MEDICAL CENTER, BOSTON, MASS., 11/67-2/69, INITIAL, \$6,000. NINDR

THE PURPOSE OF THIS RESEARCH IS TO EXPLORE THE VALUE AND FEASIBILITY OF A "PAIRED GRANT" PROGRAM FOR THE STUDY OF NEUROLOGICAL SEQUELAE RESULTING FROM HYPERBILIRUBINEMIA IN THE NEWBORN PERIOD.

- 0710 PRE-NATAL AND POST-NATAL MONOAMINES IN BRAIN AND HEART (7124-02); LICATA, RICHARD H., DESERT RESEARCH INSTITUTE, UNIVERSITY OF NEVADA, RENO, NEVADA; 2/68-1/69 RENEWAL \$11,762. NINDR

THIS RESEARCH CONCERNS CAUSAL MECHANISMS AS A BASIS FOR SPECIFIC

AND NON-SPECIFIC DEFECTS OF THE CENTRAL NERVOUS SYSTEM. THIS STUDY IS ORIENTED TOWARD A TOTAL BODY APPROACH WITH A VIEW TO RELATING SPECIFIC AND ASSOCIATED ANOMALIES AS A SYNDROMIC CONDITION.

- 0720 PRODUCTION OF ABNORMAL MOVEMENTS OF NEUROLOGIC ORIGIN (6282-03)  
METTLER, FRED A., COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND  
SURGEONS, NEW YORK, N.Y.; 6/68-5/69 RENEWAL \$11,762. NINDB

THIS RESEARCH CONCERNS THE ELUCIDATION OF THE MECHANISMS, DAMAGE OF WHICH RESULTS IN ABNORMAL MOVEMENTS SUCH AS TREMORS OR CHOREOATHETOSIS AND WITH CHANGES IN MOTOR INNERVATION LEADING TO RESTRICTIONS OF JOINT ACTION.

- 0730 RADIATION AND MORPHOLOGIC AND BEHAVIORAL DEVELOPMENT (3861-07);  
HICKS, SAMUEL P., UNIVERSITY OF MICHIGAN MEDICAL CENTER, ANN ARBOR,  
MICHIGAN; 9/68-8/69 (RENEWAL); \$16,780. (NINDB)

THIS RESEARCH CONCERNS THE EFFECTS OF RADIATION, VARIOUS ENVIRONMENTAL FACTORS, AND MUTANT GENES ON THE DEVELOPMENT OF STRUCTURE AND FUNCTION OF THE NERVOUS SYSTEM. ALTERATIONS IN STRUCTURE ARE STUDIED FROM THE HISTOMORPHOGENETIC VIEWPOINT, SOMETIMES USING TRITIATED THYMIDINE AUTORADIOGRAPHIC MONITORING, AND THE EFFECTS OF DIFFERENT DELETERIOUS FACTORS ARE COMPARED.

- 0740 RADIOCOPPER AND RADIOIRON STUDIES IN WILSON'S DISEASE (7102-02);  
O'REILLY, SEAN, UNIVERSITY OF CALIFORNIA SAN FRANCISCO MEDICAL  
CENTER, SAN FRANCISCO, CALIFORNIA; 1/68-12/68 RENEWAL \$33,839. NINDB

THIS RESEARCH PROPOSES TO INVESTIGATE COPPER AND IRON METABOLISM, USING RADIOACTIVE TRACERS, IN HOMOZYGOTES AND HETEROZYGOTES OF WILSON'S DISEASE.

- 0753 ROLE OF BRANCHED CHAIN AMINO ACIDS IN BRAIN MATURATION, 7588-01,  
COPENHAVER, JOHN H., UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.,  
9/67-8/68, INITIAL, \$19,274. NINDB

THIS RESEARCH WILL STUDY THE MECHANISM OF ACTION OF THE BRANCHED CHAIN AMINO ACIDS UPON THE DELAY IN MYELIN AND LIPID MATURATION IN BRAINS OF YOUNG RATS.

- 0760 STUDIES IN GENETICALLY-DETERMINED NEUROLOGICAL DISEASES 7701-02

AUSTIN, JAMES H., UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER,  
COLO. 9/67-8/68 INITIAL \$75,966. NINDB

THIS RESEARCH PROPOSES TO CLARIFY THE CAUSE OF SEVERAL GENETICALLY-DETERMINED DISEASES OF MYELIN, PARTICULARLY METACHROMATIC LEUKODYSTROPHY AND GLOBOID (KRABBE) LEUKODYSTROPHY. THE STUDIES ARE BIOCHEMICAL, HISTOLOGICAL, CLINICAL, AND GENETIC IN SCOPE.

- 0770 STUDIES IN TAY-SACHS DISEASE (5124-05); BALINT, JOHN A., ALBANY MEDICAL COLLEGE, ALBANY, NEW YORK; 1/68-12/68 (RENEWAL); \$16,030.. (NINDB)

THIS RESEARCH CONCERNS HEMOGLOBIN FREE RED CELL GHOSTS PREPARED FROM NORMAL SUBJECTS, HETEROZYGOUS CARRIERS OF THE TAY-SACHS TRAIT AND PATIENTS WITH TAY-SACHS DISEASE. THE GHOSTS WILL BE ANALYZED FOR HEXOSAMINE CONTENT AMINO-ACID COMPOSITION AND TOTAL NITROGEN AND WILL BE SUBJECTED TO FRACTIONATION PROCEDURES TO ISOLATE THE "STRUCTURAL" PROTEINS, AND A GLYCOPROTEIN FRACTION.

- 0790 STUDY OF BRAIN GANGLIOSIDE STRUCTURES (4834-05); LEDEEN, ROBERT W., ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY, BRONX, NEW YORK; 9/67-8/68 (RENEWAL); \$36,327. (NINDB)

THIS RESEARCH PROPOSES TO STUDY BRAIN LIPID CHEMISTRY. THIS STUDY CONCERNS THE INTER-RELATIONSHIP OF STRUCTURE AND FUNCTION.

- 0800 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN (1733-09); PORTER, HUNTINGTON, NEW ENGLAND CENTER HOSPITAL, BOSTON, MASS., 9/68-8/69 (RENEWAL); \$28,457. (NINDB)

THIS RESEARCH AIMS TO OBTAIN INFORMATION ON THE COPPER PROTEINS PRESENT IN NORMAL BRAIN AND IN IMMATURE AND ADULT LIVER AND THEIR BIOLOGICAL FUNCTIONS, AND THE TYPES OF ORGANIC COMBINATION IN WHICH COPPER IS PRESENT IN PATHOLOGICAL BRAIN AND LIVER.

- 0810 STUDY OF DIFFUSE DEGENERATIVE CNS DISEASES 4607-05 ZEMAN, WOLFGANG, INDIANA UNIVERSITY MEDICAL CENTER, INDIANAPOLIS, INDIANA; 9/67-12/68 RENEWAL \$25,234. NINDB

THIS RESEARCH CONCERNS BRAIN BIOPSIES TAKEN FROM CAREFULLY SELECTED AND EXHAUSTIVELY EXAMINED PATIENTS SUFFERING FROM



CHRONIC DEGENERATIVE DISEASES. THESE BIOPSIES ARE OBTAINED FOLLOWING RIGIDLY CONTROLLED PRECAUTIONS AND ARE TREATED FOR ELECTRON MICROSCOPIC STUDY, SLIDE HISTOCHEMISTRY, AND MICRO-CHEMISTRY.

- 0813 STUDY OF HEREDITARY NEUROMUSCULAR DISEASES, 6493-03, SCHEINBERG, I. HERBERT, ALBERT EINSTEIN COLLEGE OF MEDICINE, YESHIVA UNIVERSITY, NEW YORK, N.Y., 6/68-5/69, RENEWAL, \$107,443. NINDS

THIS RESEARCH IS COLLECTING GENETICALLY ORIENTED INFORMATION AND ANALYZING BLOOD FROM YOUNG CHILDREN TO DETECT: 1. WILSON'S DISEASE 2. AGAMMAGLOBULINEMIA 3. HEREDITARY ANGIONEUROTIC EDEMA.

- 0820 STUDY OF HYPERBILIRUBINEMIA IN THE NEWBORN (264-16); DIAMOND, LOUIS K., CHILDREN'S HOSPITAL MEDICAL CENTER, BOSTON, MASS.; 7/67-6/68 (RENEWAL); \$28,655. (NINDS)

THIS RESEARCH FOCUSES UPON ANTIBODIES AND HEMATOLOGIC DISEASE AND ATTEMPTS TO CHARACTERIZE THE TYPE OF ANTIBODIES FOUND IN CHILDREN WITH AUTO-IMMUNE HEMOLYTIC ANEMIA. THE POSSIBLE RELATIONSHIP OF ANTECEDENT VIRAL INFECTION TO THE DEVELOPMENT OF SUCH ANTIBODIES HAS BEEN STUDIED IN SEVERAL PATIENTS.

- 0833 THE PATHOGENESIS OF HEREDITARY NEUROLOGICAL DISORDERS, 6448-03, MEIER, HANS, JACKSON LABORATORY, BAR HARBOR, MAINE, 1/68-12/68, RENEWAL, \$27,007. NINDS

THIS RESEARCH STUDIES THE ANALOGIES AND THE DIFFERENCES BETWEEN HUMAN AND MOUSE NEUROLOGICAL AND NEUROMUSCULAR DISEASES. STUDIES OF PATHOGENESIS AND PATHOLOGICAL LESIONS ARE BEING DONE.

- 0840 THE ROLE OF THE THYROID GLAND IN BRAIN METABOLISM 6895-03 ARCHIBALD, REGINALD M., ROCKEFELLER UNIVERSITY, NEW YORK, N.Y. 9/68-8/69 RENEWAL \$30,054. NINDS

THIS RESEARCH CONCERNS THE ROLE OF THE THYROID GLAND IN BRAIN FUNCTION FROM 5 APPROACHES: THE INFLUENCE OF THE THYROID ON BRAIN TISSUE OXIDATIVE METABOLISM; OXIDATIVE PHOSPHORYLATION; BIOSYNTHESIS OF ACETYLCHOLINE AND THE ACTIVITY OF CHOLINESTERASE IN BRAIN TISSUE; ROLE OF ELECTROLYTES; AND THE EFFECT OF THE THYROID ON AMINO ACID INCORPORATION INTO BRAIN PROTEIN.

- 0850 THREE PROBLEMS IN EXPERIMENTAL PATHOLOGY (3670-08); VOGEL, P.

STEPHEN, DUKE UNIVERSITY, DURHAM, NORTH CAROLINA; 6/68-5/69 (RENEWAL); \$43,934. (NINDR)

THIS RESEARCH CONCERNS THE COUNT OF MITOCHONDRIA OF AGARICUS CAMPESTRIS ESTABLISHED IN EXTRACELLULAR CULTURES USING POLYSTYRENE BEADS AS THE MARKER AND EM FOR VISUALIZATION. DIPHASIC GROWTH WAS OBSERVED WHEREIN A SEVERAL-FOLD INCREMENT OCCURRED DURING THE FIRST 2 DAYS, FOLLOWED BY A DECREASE AND THEN BY A FURTHER INCREMENT DURING DAYS 4 AND 5. ALTHOUGH NUCLEIC ACID SYNTHESIS WAS DEMONSTRABLE DURING THE EARLY PHASE, PROTEIN SYNTHESIS WAS LARGELY CONFINED TO THE LATTER.

- 0860 VIRAL HEMORRHAGIC ENCEPHALITIS OF RATS (7019-02); NATHANSON, NEAL, JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH, BALTIMORE, MARYLAND; 2/68-1/69 RENEWAL \$35,305. NINDB

THIS RESEARCH PROPOSES TO CHARACTERIZE THE PHYSICAL, CHEMICAL, ANTIGENIC, AND BIOLOGICAL PROPERTIES OF THE HER AGENT, AND TO STUDY THE PATHOGENESIS OF HEMORRHAGIC ENCEPHALITIS PRODUCED BY THE HER AGENT, EXPLOITING THE UNIQUE OPPORTUNITY PRESENTED BY WHAT MAY BE THE FIRST ISOLATION OF A MAMMALIAN VIRUS WHICH REGULARLY PRODUCED HEMORRHAGIC ENCEPHALITIS.

- 0870 VIRUS-CELL INTERACTION REPLICATION AND DIFFERENTIATION (5545-04); MARGOLIS, GEORGE, DARTMOUTH MEDICAL SCHOOL, DARTMOUTH COLLEGE, HANOVER, NEW HAMPSHIRE 1/68-12/68 RENEWAL \$84,998. NINDB

THIS RESEARCH CONCERNS A GROUP OF PICODNA VIRUSES WHICH EXHIBIT A PROPENSITY FOR CELLS WITH ACTIVE DNA SYNTHESIS ATTENDING MITOSIS. THESE VIRUSES EXERT A REMARKABLY SELECTIVE ACTION ON THE DEVELOPING NERVOUS SYSTEM, ATTACKING PARTICULARLY THE ACTIVELY PROLIFERATING EXTERNAL GERMINAL LAYER OF THE CEREBELLUM, AND RESULTING IN AN INTRACTABLE ATAXIA BECAUSE OF A "HYPOPLASIA" OF THE GRANULAR LAYER.

#### EPIDEMIOLOGY

- 0880 EPIDEMIOLOGY OF MENTAL RETARDATION IN A RURAL COUNTY (H-34); IMRE, PAUL D., JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND; 12/67-11/68 (RENEWAL); \$53,456. SRS

THIS RESEARCH PROPOSES TO UNCOVER EVERY CASE OF MENTAL RETARDATION IN AN ENUMERATED AND CLINICALLY SCREENED POPULATION OF A POLITICAL SUBDIVISION IN MARYLAND. HOUSEHOLDS WITH A RETARDED PERSON WILL BE EXTENSIVELY INVESTIGATED ON SOCIAL, ECONOMIC, MEDICAL, EDUCATIONAL AND VOCATIONAL VARIABLES AND WILL BE

COMPARED WITH CONTROL HOUSEHOLDS.

- 0910 HUMAN CHROMOSOMAL DEFECTS-EPIDEMIOLOGY & ETIOLOGY R01 00622-04S1  
ROBINSON, ARTHUR, UNIVERSITY OF COLORADO, DENVER, COLO, 10/67-  
6/68 RENEWAL \$8,662. NICHD

THIS RESEARCH PROPOSES TO STUDY THE FREQUENCY OF OCCURRENCE  
OF CHROMOSOMAL ABNORMALITIES IN HUMAN AND MAMMALIAN CELLS IN  
VITRO AND IN VIVO; TO DETERMINE CAUSATIVE AGENTS AND THEIR MODE  
OF ACTION, AND TO ESTABLISH CHROMOSOMAL AND BIOCHEMICAL MARKERS  
WHICH WILL PERMIT ANALYSIS OF THESE ACTIONS.

- 0930 SOCIOBEHAVIORAL STUDY CENTER FOR MENTAL RETARDATION (MH-8667-03);  
DINGMAN, HARVEY F, PACIFIC STATE HOSPITAL, POMONA, CALIFORNIA; 10/68  
(RENEWAL); \$454,625. (NIMH)

THIS RESEARCH PROPOSES TO STUDY THE PROGNOSIS OF THE MENTALLY  
RETARDED INDIVIDUAL IN HIS DEVELOPMENT AS RELATED TO INSTITUTIONAL  
LIFE, HIS INTERACTION WITH HIS FAMILY AND WITH GREATER SOCIAL  
STRUCTURES IN THE COMMUNITY.

- 0935 WORKSHOP ON HEREDITARY NEUROMUSCULAR DISEASES, 7668-01,  
JANEWAY, CHARLES A., NATIONAL FOUNDATION FOR NEUROMUSCULAR DISEASES,  
INC., NEW YORK, N.Y., 6/67-5/69, INITIAL, \$20,000. NINDS

THIS PROJECT WILL DEVELOP A LIMITED ATTENDANCE WORKSHOP CONFERENCE  
ON NEUROMUSCULAR DISEASES. THE GOAL OF THIS EFFORT IS THE DETECTION  
OF INDIVIDUALS GENTICALLY PREDETERMINED TO DEVELOP SERIOUS AND  
DEBILITATING DISEASES.

#### PATHOPHYSIOLOGY

- 0940 ABNORMAL AMINO ACID METABOLISM IN MENTAL RETARDATION (R01 01326-04);  
GREER, MELVIN, UNIVERSITY OF FLORIDA, GAINESVILLE, FLA.; 1/68-12/69  
(RENEWAL); \$12,700. (NICHD)

THIS RESEARCH CONCERNS THE DETECTION, WITH THE AID OF GAS-  
LIQUID CHROMATOGRAPHY, OF CERTAIN DISORDERS OF METABOLIC  
ORIGIN CAUSING CEREBRAL DYSFUNCTION AND MENTAL RETARDATION;  
THE CLINICAL COURSE MAY BE OBSERVED BY MEASUREMENT OF CERTAIN  
BIOCHEMICAL PARAMETERS.

- 0950 A CENTER FOR RESEARCH IN HUMAN LEARNING (P01 01136-04); DARLEY, JOHN

G., UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN. 9/67-8/72 (RENEWAL); \$138,095. (NICHD)

THIS RESEARCH CONCERNS A PROGRAM IN 6 AREAS OF HUMAN LEARNING: ACQUISITION AND UTILIZATION OF LANGUAGE; DEVELOPMENTAL CHANGES IN LEARNING PROCESSES; DISTURBANCES IN LEARNING PROCESSES; TEACHING METHODS AND CURRICULUM DEVELOPMENT; ANALYSIS OF CONTENT LEARNING THROUGH PROGRAMMED INSTRUCTION; AND INTEGRATIVE ASPECTS OF LEARNING RESEARCH.

0970 AMINO ACID FLUX IN DEVELOPING BRAIN RO1 01889-03, SWAIMAN, KENNETH F., UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN. 2/68-1/69 RENEWAL \$27,168. NICHD

THIS RESEARCH PROPOSES TO STUDY FLUX OF AMINO ACIDS INTO PROTEIN OF DEVELOPING BRAIN IN AN ATTEMPT TO DELINEATE CRUCIAL TIMES OF SYNTHESIS DURING DEVELOPMENT AND THEN TO STUDY THE EFFECT OF CONCENTRATION CHANGES OF SPECIFIC AMINO ACIDS ON SYNTHESIS.

0980 AMINO ACID INTERRELATIONS IN HUMAN METABOLIC DISEASE RO1 02609-06 NYHAN, WILLIAM L., UNIVERSITY OF MIAMI, CORAL GABLES, FLA. 6/68-5/71 RENEWAL \$40,354. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE INTERRELATIONSHIPS OF AMINO ACIDS IN METABOLIC DISEASES. A NEW DISORDER OF AMINO ACID METABOLISM IS UNDER STUDY IN WHICH LEUKOPENIA, MENTAL RETARDATION AND RECURRENT EPISODES OF KETOSIS HAVE BEEN ASSOCIATED WITH ELLEVATED LEVELS OF GLYCINE IN THE BLOOD, URINE AND CEREBROSPINAL FLUID.

0990 AMNIOTIC FLUID CONSTITUENTS IN FETAL ERYTHROBLASTOSIS RO1 02239-03 CHERRY, SHELDON H., MT. SINAI HOSPITAL, NEW YORK, N Y 6/68-5/70 RENEWAL \$32,176 NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE QUALITATIVE AND QUANTITATIVE DIFFERENCES BETWEEN THE CONSTITUENTS OF AMNIOTIC FLUID IN NORMAL PREGNANCIES AND THOSE COMPLICATING THE PRESENCE OF FETAL ERYTHROBLASTOSIS AND THERERY IMPROVE OUR UNDERSTANDING OF THE PATHOGENESIS AND ANTE-NATAL MANAGEMENT OF THIS DISEASE.

1025 BACTERIURIA IN THE PREMATURE INFANT RO1 03382-01, HODGMAN, JOAN E., LOS ANGELES COUNTY GENERAL HOSPITAL, LOS ANGELES, CALIF., 4/68-3/72, INITIAL, \$52,014. NICHD

THIS RESEARCH PROPOSES TO DEVELOP REPRODUCIBLE METHODS FOR THE

DETECTION OF SIGNIFICANT BACTERIURIA AND STANDARDS OF INTERPRETATION  
THAT CAN BE APPLIED TO PREMATURE INFANTS.

- 1030 BASIC CORRELATES OF NEONATAL SUCKING BEHAVIOR R01 02458-02  
KAYF, HERBERT, EMORY UNIVERSITY, ATLANTA, GEORGIA, 1/68-12/69 RENEWAL  
\$39,254. NICHD

THIS RESEARCH PROPOSES TO EXAMINE SIMPLE BEHAVIORAL AND PSYCHO-  
PHYSIOLOGICAL PATTERNS IN INFANTS FROM "NORMAL" AND "SUSPECT"  
POPULATIONS AND TO RELATE SPECIFIC DIFFERENCES IN PATTERNS TO  
PRE- AND PERINATAL FACTORS, TO CONDUCT STUDIES TO REFINES BASIC  
LEARNING AND SENSORY ASSESSMENT TECHNIQUES NOW USING THE SUCK-  
ING RESPONSE, AND TO RELATE THIS WORK TO THE GENERAL LAWS OF  
BEHAVIOR.

- 1040 BEHAVIOR FOLLOWING REARING IN A RANDOM ENVIRONMENT R01 02325-02  
MILES, RAYMOND C, UNIVERSITY OF COLORADO, BOULDER, COLO., 10/67-  
9/69 RENEWAL \$21,339. NICHD

THIS RESEARCH PROPOSES TO SYSTEMATICALLY ASSESS BEHAVIORAL  
EFFECTS OF REARING IN AN ENVIRONMENT WHERE PRACTICALLY ALL  
EXTERNAL STIMULUS CHANGES OCCUR IN AN UNPREDICTABLE MANNER.

- 1050 BEHAVIOR IN THE PROGENY OF UNDERFED MOTHERS R01 02984-02, CHOW,  
BACON F., JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND, 6/68-5/72  
RENEWAL \$26,555. NICHD

THIS RESEARCH CONCERNS MALE PROGENY OF MOTHER RATS RESTRICTED  
TO 50% OF THEIR NORMAL FOOD INTAKE DURING PREGNANCY AND LAC-  
TATION; THEIR PERFORMANCE IN COMPARISON WITH NORMAL PROGENY  
WILL BE EVALUATED BY ACTIVITY IN A WHEEL CAGE, RUNNING PATTERNS  
IN A FIELD BOX, CONDITIONED EMOTIONAL RESPONSES, MAZE RUNNING  
AND AVOIDANCE-ESCAPE RESPONSES.

- 1055 BILIRUBIN METABOLISM DURING THE PERINATAL PERIOD R01 03148-01, THALER,  
M. MICHAEL, UNIVERSITY OF CALIFORNIA, SAN FRAN., CALIF., 2/68-1/70,  
INITIAL, \$44,139. NICHD

THIS RESEARCH WILL INVESTIGATE DEVELOPMENTAL CHANGES IN THE PROCESSES  
OF CONJUGATION AND BILIARY EXCRETION OF BILE PIGMENT BEFORE AND  
AFTER BIRTH.

- 1060 BIOCHEMICAL AND ANIMAL STUDIES IN MENTAL RETARDATION R01 00341-08

WAISMAN, HARRY AARON, UNIVERSITY OF WISCONSIN, MADISON, WISC., 6/68-5/70 RENEWAL, \$134,985. NICHD

THIS RESEARCH CONCERNS "MAPPING" OF IN VIVO BRAIN PROTEIN SYNTHESIS BY DEAE CELLULOSE CHROMATOGRAPHY OF ONE CYTOPLASMIC AND TWO PARTICULATE FRACTIONS FOR 3-DAY-OLD AND 10-DAY-OLD RATS. DATA FROM THIS STUDY WILL PROVIDE A BASELINE WITH WHICH TO COMPARE PROTEIN SYNTHESIS IN BRAIN PREPARED FROM HORMONE TREATED RATS.

- 1070 BIOCHEMICAL AND MOLECULAR BASIS OF MENTAL DISEASE R01 01594-04, SHAW, KENNETH N.F., CHILDREN'S HOSPITAL OF LOS ANGELES, LOS ANGELES, CALIFORNIA, 6/68-5/70 RENEWAL \$94,327. NICHD

THIS RESEARCH PROPOSES TO CONTINUE SCREENING OF URINES FROM MENTALLY RETARDED PATIENTS FOR METABOLIC ABNORMALITIES WITH THE USE OF CHEMICAL TESTS AND PAPER CHROMATOGRAPHY. PATIENTS FOUND TO BE ABNORMAL WILL BE INVESTIGATED IN MORE DETAIL WHEN EVALUATION INDICATES THAT USEFUL BIOCHEMICAL, CLINICAL OR THERAPEUTIC INFORMATION MAY BE OBTAINED.

- 1080 BIOCHEMICAL CAUSES OF MENTAL RETARDATION R01 02152-03, GHADIMI, HOSSEIN, STATE UNIVERSITY OF NEW YORK, NEW YORK CITY, N.Y., 4/68-3/69 RENEWAL \$67,923. NICHD

NO ABSTRACT SUPPLIED.

- 1090 BIOCHEMICAL CORRELATES OF CHROMOSOMAL ANOMALIES R01 02044-02 PAINE, RICHMOND S., CHILDREN'S HOSPITAL OF D.C., WASHINGTON, D.C., 8/67-7/69 RENEWAL \$38,367. NICHD

THIS RESEARCH AIMS TO DETECT CORRELATIONS BETWEEN BIOCHEMICAL AND CHROMOSOMAL ABNORMALITIES IN PATIENTS AND IN CLINICALLY NORMAL CARRIERS, AND TO COMPARE THESE WITH PHYSICAL FINDINGS, DERMATOGLYPHICS, INTELLIGENCE AND OTHER CLINICAL DATA. THIS IS AN EXTENSION OF STUDIES OF TRISOMIC AND TRANSLOCATION MONGOLS UNDER A CONTRACT WITH THE DIVISION OF CHRONIC DISEASES, AND ITS EXTENSION TO CHROMOSOMAL ABBERATIONS OTHER THAN MONGOLISM.

- 1210 BIOCHEMICAL DEFECTS RELATED TO CONGENITAL ANOMALIES R01 03448-01, SCHAFFER, IRWIN A., CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, 9/67-8/68, INITIAL, \$31,325. NICHD

THIS RESEARCH PROPOSES TO GAIN AN UNDERSTANDING OF THE MOLECULAR

MECHANISMS OF ACTION OF TERATOGENIC AGENTS, AND RELATE THIS TO  
THE PRODUCTION OF SPECIFIC HUMAN MALFORMATIONS.

- 1220 BIOCHEMICAL DEVELOPMENT OF SURFACTANT OF LUNG RO1 01299-03, GLUCK,  
LOUIS, YALE UNIVERSITY, NEW HAVEN, CONNECTICUT, 10/67-7/68 RENEWAL  
\$41,461. NICHD

THIS RESEARCH CONCERNS THE QUANTITATIVE CHANGES AND BIOSYNTHESIS  
OF PHOSPHOLIPIDS IN LUNGS OF DEVELOPING MAMMALIAN FETUSES AND  
THE RELATION OF THESE PHOSPHOLIPIDS TO THE DEVELOPMENT OF SUR-  
FACE ACTIVITY OF LUNG. THESE STUDIES INCLUDE IDENTIFICATION  
OF SURFACE ACTIVE COMPOUNDS, QUANTIFICATION DURING FETAL DEVELOPMENT,  
ENZYMATIC SYNTHESSES, STRUCTURAL CHARACTERISTICS AND ALTERATIONS  
WITH ALTERED PHYSIOLOGICAL STATES.

- 1230 BIOCHEMICAL DISTURBANCES IN DOWN'S SYNDROME RO1 00800-05, DONNELL,  
GEORGE N., CHILDREN'S HOSPITAL OF LOS ANGELES, LOS ANGELES, CALIF.  
6/68-5/69 RENEWAL \$33,592. NICHD

THIS RESEARCH PROPOSES TO STUDY THE METABOLISM OF GALACTOSE AND  
GLUCOSE IN TISSUES OF INDIVIDUALS WITH DOWN'S SYNDROME (MONGOLISM).  
LEUCOCYTES, ERYTHROCYTES, SKIN AND INTESTINAL MUCOSA WILL BE USED  
FOR IN VITRO STUDIES EMPLOYING ISOTOPE TRACER TECHNIQUES.

- 1240 BIOCHEMICAL EFFECTS OF HUMAN CHROMOSOMAL ABERRATIONS RO1 01733-03  
KRONE, WINFRID, GRADUATE RESEARCH CENTER OF THE SOUTHWEST, DALLAS,  
TEXAS 8/67-7/68 RENEWAL \$21,833. NICHD

THIS RESEARCH CONCERNS THE STUDY OF ALTERATIONS OF METABOLISM  
RESULTING FROM CHROMOSOMAL ABNORMALITIES. SOME INFORMATION  
CAN BE OBTAINED FROM THE ANALYSIS OF EXCRETIONS SUCH AS  
URINE, SALIVA, PERSPIRATION, OR BY STUDYING THE COMPOSITION  
AND ENZYMATIC ACTIVITIES OF CELLULAR AND NON-CELLULAR COMPONENTS  
OF THE BLOOD. PREFERENCE IS GIVEN TO THE STUDY OF THE BIOCHEMISTRY  
OF CELLS CULTURED IN VITRO.

- 1250 BIOCHEMICAL INVESTIGATION OF MENTAL RETARDATION RO1 02143-03, BERLOW,  
STANLEY, MICHAEL REESE HOSPITAL AND MEDICAL CENTER, CHICAGO, ILLINOIS  
9/67-8/68 RENEWAL \$14,548. NICHD

THIS RESEARCH PROPOSES TO SET UP PROCEDURES FOR SCREENING BLOOD  
AND URINE OF INFANTS IN THE NEONATAL PERIOD IN AN EFFORT TO  
FIND INBORN ERRORS OF METABOLISM. IF EARLY DIAGNOSIS IS POSSIBLE,  
AN ATTEMPT WILL BE MADE TO MODIFY THE ENZYMATIC DEFECT BY DIETARY  
OR CO-FACTOR THERAPY AND THUS HOPEFULLY PREVENT MENTAL RETARDA-

TION.

- 1260 BIOCHEMICAL SYSTEMS IN EXPERIMENTAL MENTAL DEFICIENCY R01 01058-03S1  
YUWILER, ARTHUR, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., 9/67-  
8/68 RENEWAL \$8,976. NICHD

THIS RESEARCH PROPOSES TO EXPLORE THE MECHANISM OF ALTERATION  
IN CENTRAL AMINES ACCOMPANYING AMINO ACID LOADING, EXPLORE THE  
RELATIONSHIP BETWEEN CENTRAL ALTERATIONS AND BEHAVIOR, TEST  
THE ADEQUACY OF THE EXPERIMENTAL MODEL, EXTEND THE MODEL TO  
METABOLIC DISEASES, AND EXPLORE THE EFFICACY OF CHRONIC AMINE  
DEPLETION IN DEVELOPING AN ALTERNATE MODEL.

- 1270 BIOLOGIC EFFECTS OF ABO HETEROSPECIFIC PREGNANCY R01 01461-12, KAPLAN,  
EUGENE, SANA I HOSPITAL OF BALTIMORE, BALTIMORE, MARYLAND, 4/68-3/70  
RENEWAL \$55,980. NICHD

THIS RESEARCH CONCERNS THE SIGNIFICANCE OF REDUCED RED CELL  
ACETYLCHOLINESTERASE (ACHE) ACTIVITY IN NEWBORN INFANTS OF ABO  
HETEROSPECIFIC PREGNANCY UNDER CONTINUED INVESTIGATION BY  
CLINICAL, BIOCHEMICAL, AND ANIMAL STUDIES.

- 1280 BIOSYNTHESIS OF PULMONARY SURFACE ACTIVE LIPIDS R01 02354-02  
MORGAN, THOMAS E., JR., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON,  
9/67-8/69, RENEWAL, \$26,445. NICHD

THIS RESEARCH PROPOSES TO ISOLATE AND CHARACTERIZE THE ENZYME,  
TO STUDY THE PARAMETERS INFLUENCING ITS ACTIVITY, TO RELATE  
ITS ACTIVITY TO SURFACTANT LEVELS AND TO INVESTIGATE THE IN-  
FLUENCE OF GESTATIONAL AGE, ACIDOSIS, HYPOXIA, TEMPERATURE AND  
RELATED FACTORS ON ITS ACTIVITY IN VITRO AND IN VIVO.

- 1300 CARBOHYDRATE METABOLISM IN NEONATE R01 00235-07, CORNBATH,  
MARVIN, UNIVERSITY OF ILLINOIS, CHICAGO, ILL., 9/67-6/68 RENEWAL  
\$27,202. NICHD

THIS RESEARCH CONCERNS THE ROLE OF GROWTH HORMONE, INSULIN,  
FREE FATTY ACIDS AND GLYCEROL IN THE REGULATION OF CARBOHYDRATE  
METABOLISM IN THE LOW BIRTH WEIGHT (PREMATURE) AND FULL-SIZED  
NEONATE. WITH A VARIETY OF CARBOHYDRATE TOLERANCE TESTS, GLU-  
CONEOGENESIS AND GLYCOGENOLYSIS ARE BEING ESTIMATED IN NORMAL  
NEWBORNS AND INFANTS WITH SYMPTOMATIC NEONATAL HYPOGLYCEMIA.

- 1320 CENTER FOR NORMAL AND ABERRANT ADAPTIVE DEVELOPMENT P01 00719-07



BIRCH, HERBERT G., YESHIVA UNIVERSITY, NEW YORK, N.Y., 10/67-9/68  
RENEWAL \$294,167. NICHD

THIS RESEARCH CONCERNS THE ANALYSIS OF PROCESSES UNDERLYING NORMAL AND ABERRANT BEHAVIORAL DEVELOPMENT. WE HAVE CONDUCTED EXPERIMENTAL, OBSERVATIONAL AND EPIDEMIOLOGIC INQUIRIES RELATING TO FACTORS AFFECTING NEUROLOGIC AND BEHAVIORAL DEVELOPMENT. CENTRAL TO ALL THE INVESTIGATIONS HAS BEEN THE ANALYSIS OF PERCEPTUAL DEVELOPMENT AND THE RELATION OF SUCH DEVELOPMENT TO THE ACQUISITION OF LEARNED SKILLS AND TO THE CONTROL OF ACTION.

- 1330 CENTRAL NERVOUS SYSTEM SEQUELAE OF PREMATUREITY RO1 02081-02  
GOLDMAN, HERBERT I., LONG ISLAND JEWISH HOSPITAL, NEW HYDE PARK,  
NEW YORK, 1/68-12/69 RENEWAL \$28,426. NICHD

THIS RESEARCH PROPOSES TO DETERMINE WHETHER THERE ARE ANY DIFFERENCES IN THE INCIDENCE AND SEVERITY OF CENTRAL NERVOUS SYSTEM SEQUELAE BETWEEN THE 2 AND 4% PROTEIN DIET GROUPS AND TO STUDY THE RELATIONSHIP BETWEEN CLINICAL PARAMETERS OBTAINED DURING THE INFANTS STAY IN THE PREMATURE NURSERY AND THE LATER PRESENCE OR ABSENCE OF CENTRAL NERVOUS SYSTEM SEQUELAE.

- 1340 CEREBROVASCULAR RESPONSE TO EMBRYONIC OVERGROWTH RO1 01679-03  
BURDA, DORIS J., STANFORD UNIVERSITY, STANFORD, CALIF., 2/68-1/69  
RENEWAL \$7,453. NICHD

THIS RESEARCH CONCERNS DEVELOPMENTAL INTERRELATIONSHIPS BETWEEN THE CEREBROVASCULAR SYSTEM AND THE EMBRYONIC BRAIN. A STUDY WILL BE MADE OF CHANGES IN THE INTRACRANIAL ARTERIAL PATTERN IN THE BRAINS OF CHICK EMBRYOS.

- 1345 CHEMICAL EVALUATION OF FETAL RESPIRATION AND DISTRESS RO1 03356-01,  
SEEDS, ASA ELMORE JR., JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.,  
3/68-2/71, INITIAL, \$21,614. NICHD

THIS RESEARCH IS CONCERNED WITH THE DEVELOPMENT OF A CLINICALLY USEFUL CHEMICAL INDEX OF FETAL STATUS IN UTERO VIA ACID BASE MEASUREMENTS OF AMNIOTIC FLUID AND FETAL CAPILLARY BLOOD DURING LABOR.

- 1350 CHEMICAL STUDY OF CONGENITAL MENTAL DEFECTS RO1 00198-10, HOLT, L.  
EMMETT, JR., NEW YORK UNIVERSITY, NEW YORK, N.Y., 9/67-8/71 RENEWAL  
\$33,192. NICHD

THIS RESEARCH CONCERNS DIETOTHERAPY AND CLOSE OBSERVATION OF

CHILDREN PRESENTLY UNDER TREATMENT FOR MAPLE SYRUP URINE DISEASE. THE FORMATION OF ALLOISOLEUCINE AFTER A LOAD OF ISOLEUCINE WILL BE INVESTIGATED AS A POSSIBLE MEANS OF DIFFERENTIATING THE HETEROZYGOUS CARRIER OF THE DISEASE FROM THE NORMAL.

- 1360 CLASSICAL CONDITIONING OF EYEMOVEMENTS IN RETARDATE RO1 01649-03  
ZEAMAN, DAVID, UNIVERSITY OF CONNECTICUT, STORRS, CONN., 9/67-8/68  
RENEWAL \$27,533. NICHD

THIS RESEARCH CONCERNS THE RELATION OF DEVELOPMENTAL VARIABLES (MA, CA, AND IQ) AND THE CLASSICAL CONDITIONING OF EYEMOVEMENTS IN RETARDATE. EXTINCTION AND SPONTANEOUS RECOVERY MEASURES APPEAR TO BE INVARIANT OVER A WIDE RANGE OF THESE DEVELOPMENTAL VARIABLES. RATE OF ACQUISITION WAS FOUND TO BE POSITIVELY RELATED TO DEVELOPMENTAL LEVEL PROVIDED THAT A JOINT INDEX OF MA AND IQ WAS USED.

- 1370 CONGENITAL MALFORMATIONS IN MAMMALS RO1 00502-08, WARKANY, JOSEF,  
CHILDREN'S HOSPITAL RESEARCH FOUNDATION, CINCINNATI, OHIO, 9/67-  
8/70 RENEWAL \$79,511. NICHD

THIS RESEARCH CONCERNS THE STUDY OF CONGENITAL MALFORMATIONS. EXPERIMENTAL TERATOLOGY IS PRACTICED BY THE USE OF VARIOUS TERATOGENS IN RATS, MICE AND RABBITS. CONGENITAL MALFORMATIONS OF CHILDREN ARE INVESTIGATED BY CLINICAL, ANATOMIC, HISTOLOGIC AND CYTOGENETIC METHODS.

- 1390 COMMUNICATION DISORDERS OF THE MENTALLY RETARDED, RO1 00870-05  
SCHIEFELBUSCH, R.L., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS,  
10/67-9/70 RENEWAL \$331,296. NICHD

THIS RESEARCH PROPOSES TO ESTABLISH A RESEARCH SETTING IN A DEPRIVED NEIGHBORHOOD AND TO FORMULATE AND INITIATE A PROGRAM OF RESEARCH CONCERNED WITH FACTORS OF INADEQUATE DEVELOPMENT.

- 1400 DELAY OF REINFORCEMENT AND CHILDREN'S BEHAVIOR RO1 02689-02  
RABINOWITZ, F. MICHAEL, UNIVERSITY OF WASHINGTON, SEATTLE, WASH.,  
1/68-12/68 RENEWAL \$18,980. NICHD

THIS RESEARCH CONCERNS A COMPREHENSIVE UNDERSTANDING OF CHILDREN'S BEHAVIOR IN RELATION TO DELAY OF REINFORCEMENT; 18 SYSTEMATIC AND INTER-RELATED EXPERIMENTS ARE SUGGESTED. ALTHOUGH SOME CURRENT THEORETICAL ISSUES ARE DISCUSSED, THE EMPHASIS IS EMPIRICAL. MANY INCONSISTENCIES IN THE CHILD DELAY OF REINFORCEMENT LITERATURE CAN ONLY BE RESOLVED THROUGH CONCENTRATED EXPERIMENTAL

EFFORT.

- 1430 DEVELOPMENT OF CONCEPTIONS OF PSYCHOLOGICAL CAUSALITY RO1 02574-03  
WHITEMAN, MARTIN, COLUMBIA UNIVERSITY, NEW YORK, N.Y., 6/68-9/68  
RENEWAL \$12,393, NICHD

THIS RESEARCH PROPOSES TO STUDY THE DEVELOPMENTAL PROBLEM, THE PROBLEM OF EXPERIENTIAL BACKGROUND, AND THE BEHAVIORAL SIGNIFICANCE PROBLEM BY INTERVIEWING CHILDREN WITH RESPECT TO THEIR UNDERSTANDING OF THE MOTIVATIONS OF A CHILD IN A NUMBER OF STORY SITUATIONS, WITH EACH STORY EXEMPLIFYING IN RUDIMENTARY FORM A DIFFERENT MECHANISM OF ADJUSTMENT.

- 1440 DEVELOPMENT OF HIGH VOLTAGE ELECTROPHORESIS USES RO1 00040-05  
MABRY, C. CHARLTON, UNIVERSITY OF KENTUCKY, LEXINGTON, KY., 2/68-1/70, RENEWAL \$15,960. NICHD

THIS RESEARCH INCLUDES DEVISING HVPE MEANS FOR THE RAPID PARTITION OF CERTAIN ORGANIC SUBSTANCES IN BIOLOGIC FLUIDS AND PERFECTING THEIR SUBSEQUENT QUANTITATIVE MEASUREMENT BY APPROPRIATE COLOR DEVELOPMENT AND DIRECT DENSITOMETRY; THE CLINICAL PHASE OF THE PROJECT INCLUDES THE SCREENING AND STUDYING PATIENTS WITH NEUROLOGIC AND/OR METABOLIC DEFICITS POSSIBLY INVOLVING THE ORGANIC SUBSTANCES TO BE MEASURED IN THEIR SERA AND URINE.

- 1450 DEVELOPMENT OF LIVER ENZYMES RO1 00375-12, NEMETH, ANDREW M., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA., 9/67-8/74 RENEWAL \$18,317. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE DEVELOPMENTAL PATTERN OF ENZYMES UNIQUE TO THE LIVER IN THE ADULT MAMMAL AND TO STUDY THE FACTORS THAT MAY CONTROL THIS PATTERN AND THE ENZYME FORMATION IN CULTURED LIVER CELLS.

- 1465 EARLY EXPERIENCE- INTELLECTUAL AND ADAPTIVE DEVELOPMENT RO1 03720-01A1,  
DAVENPORT, RICHARD K. JR., EMORY UNIVERSITY, ATLANTA, GA., 6/68-5/71,  
INITIAL, \$31,783. NICHD

THIS STUDY WILL INVESTIGATE THE INTELLECTUAL AND SOCIAL CONSEQUENCES OF DIFFERENT TYPES OF EARLY ENVIRONMENTS IN CHIMPANZEES.

- 1470 EEG AUDIOMETRICS IN THE SEVERELY RETARDED; HD 01655-03, RENEAU,  
JOHN P., WISCONSIN STATE DEPARTMENT OF PUBLIC WELFARE, MADISON, WISC.,

9/67-8/68 RENEWAL \$18,416. NICHD

THIS RESEARCH PROPOSES TO DEVELOP AND ADAPT A RADIO TELEMETRY EEG COMPUTER SYSTEM WITH WHICH AUDITORY THRESHOLD MAY BE ASSESSED AND AN EVALUATION MADE OF OVERT AUDITORY BEHAVIOR.

- 1475 EFFECT OF AMINO ACID LEVELS ON PROTEIN BIOSYNTHESIS RO1 03691-01, RUDOLPH, NATHAN, MAIMONIDES MEDICAL CTR, NEW YORK, N.Y., 5/68-4/71, INITIAL, \$31,290. NICHD

THIS RESEARCH WILL STUDY THE EFFECT OF HIGH AMINO ACID LEVELS ON THE INCORPORATION INTO PROTEIN OF RADIOACTIVE AMINO ACIDS IN PREPARATIONS FROM LIVER AND BRAIN CELLS OF ANIMALS.

- 1480 EFFECT OF AMINO ACIDS ON METABOLISM, EEG, AND BEHAVIOR (1) RO1 01823-04S1, (2) RO1 01823-06, MCKEAN, CHARLES M., SONOMA STATE HOSPITAL, ELDRIDGE, CALIFORNIA, (1) 4/66-3/68, (2) 4/68-3/73, RENEWAL, (1) \$3,229, (2) \$112,080. NICHD

THIS RESEARCH FOCUSES UPON THE THERAPEUTIC SIGNIFICANCE OF THE POSSIBILITY OF A RESULTING QUALITATIVE OR QUANTITATIVE ABNORMALITY OF CEREBRAL PROTEIN SYNTHESIS IN HUMAN CSF AND IN THE CSF AND BRAINS OF PIGS RENDERED HYPERPHENYLALANINEMIC IN INFANCY. PRELIMINARY DATA SUGGESTING ELECTROPHYSIOLOGICAL CHANGES IN THE PRESENCE OF HIGH CSF PHENYLALANINE IS BEING FURTHER STUDIED.

- 1490 EFFECTS OF RNA AND DNA ON EMBRYONIC CEPHALIC TERATA RO1 00827-05 HILLMAN, NINA W., TEMPLE UNIVERSITY, PHILADELPHIA, PENNSYLVANIA, 6/68-5/70 RENEWAL \$36,620. NICHD

THIS RESEARCH INVOLVES TREATING EMBRYOS AT EARLY STAGES OF DEVELOPMENT WITH RNA SPECIFICITY. THE RNA'S BEING TESTED ARE PRIMARILY FROM HEART, LIVER AND BRAIN. THE TIME THAT THE RNA AFFECTS THE EMBRYO IS BEING STUDIED TO ASCERTAIN WHETHER ITS EFFECTS ARE TIME DEPENDENT. INVESTIGATIONS ARE ALSO BEING CONDUCTED IN THE CHICK TO DETERMINE WHETHER ECTODERM CAN BE "CANALIZED" TO FORM SPECIFIC STRUCTURES WHICH ARE THE SAME AS THE TISSUE SOURCE OF THE RNA.

- 1500 EFFECTS OF VIRUSES ON HUMAN CHROMOSOMES RO1 02774-02, EISEN, JAMES D., UNIVERSITY OF NEBRASKA, LINCOLN, NEBR., 10/67-9/69 RENEWAL, \$30,190. NICHD

THIS RESEARCH ATTEMPTS TO FURTHER ELUCIDATE THE ROLE OF VIRUSES IN HUMAN MENTAL RETARDATION CONGENITAL MALFORMATIONS AND FETAL

OR NEONATAL DEATH BY A SYSTEMATIC STUDY IN VITRO AND IN VIVO OF EFFECTS OF VARIOUS VIRUSES UPON HUMAN CHROMOSOMES AND TO INVESTIGATE IN DEPTH THE IN VIVO EFFECTS ON HUMAN CHROMOSOMES OF THE CYTOMEGALIC INCLUSION DISEASE VIRUS, RECENTLY RECOGNIZED AS IMPORTANT IN THE ETIOLOGY OF THE ABOVE PROBLEMS.

- 1530 EVOKED EEG POTENTIALS AND DIET OF PREMATURE INFANTS R01 01405-04  
GORDON, HARRY H., YESHIVA UNIVERSITY, NEW YORK, N.Y., 1/68-12/68  
RENEWAL \$77,604. NICHD

THIS RESEARCH PROPOSES TO CORRELATE THE ELECTROENCEPHALOGRAPHIC FINDINGS, SENSORY EVOKED RESPONSES AND BEHAVIORAL MATURATION OF THE PREMATURELY BORN INFANT AND DETERMINE THE RELATIONSHIP BETWEEN THESE MEASUREMENTS AND THE CONCENTRATIONS IN BLOOD OF A NUMBER OF AMINO ACIDS, AS AFFECTED BY RENAL AMINO ACID CLEARANCES AND BY VARIATIONS IN DIETARY INTAKE OF PROTEIN, ASCORBIC ACID, AND OTHER VITAMINS.

- 1540 EXPERIMENTAL CNS LESIONS AND PSYCHOSOMATIC MATURATION R01 02277-03  
KLING, ARTHUR, UNIVERSITY OF ILLINOIS, CHICAGO, ILL., 6/68-5/70  
RENEWAL \$62,082. NICHD

THIS RESEARCH PROPOSES TO CONTINUE ITS INVESTIGATIONS INTO THE DIFFERENTIAL EFFECTS OF EARLY VS. LATE LOCALIZED BRAIN INJURY IN CARNIVORS AND PRIMATES. THE PROGRAM IS BEING EXTENDED TO INVESTIGATE THE NEUROL MECHANISMS BY WHICH FUNCTIONAL SPARING FOLLOWING ABLATIONS OF ANATOMICALLY DEFINED BRAIN AREAS OCCURS BY EXTENDING THE ABLATIONS TO INCLUDE RELATED CORTICAL REGIONS AND RELATED SUBCORTICAL STRUCTURES IN CAT AND MONKEY.

- 1550 EXPERIMENTAL PKU INDUCED BY ENZYME INHIBITORS R01 01972-03, MITOMA,  
CHOZO, STANFORD RESEARCH INSTITUTE, MENLO PARK, CALIF., 2/68-1/69  
RENEWAL, \$24,070. NICHD

THIS RESEARCH PROPOSES TO SYNTHESIZE AND EVALUATE POTENTIAL INHIBITORS OF PHENYLALANINE HYDROXYLASE. SO FAR, THE MOST POTENT INHIBITOR WITH A MINIMUM OF SIDE-EFFECTS HAS BEEN FOUND TO BE ESCULETIN (6,7-DIHYDROXYCOUMARIN). THE ULTIMATE OBJECTIVE IS TO STUDY BRAIN BIOCHEMISTRY AS IT RELATES TO MENTAL RETARDATION AND NEUROLOGICAL PATHOLOGY.

- 1560 EXPERIMENTAL PHENYLKETONURIA IN INFANT RATS HD 02669-02, LONGENECKER,  
J.B., UNIVERSITY OF TEXAS, AUSTIN, TEXAS, 1/68-12/69 RENEWAL,  
\$24,232. NICHD

THIS RESEARCH PROPOSES TO PRODUCE A PERMANENT MENTAL DEFECT

IN RATS BY NUTRITIONAL AND/OR BIOCHEMICAL MEANS WHICH MAY DUPLICATE THOSE FOUND IN PHENYLKETONURIA AND LEAD TO THE SAME TYPE PERMANENT BRAIN DAMAGE AS OCCURS IN THE HEREDITARY DISEASE. THE EVENTUAL AIM IS TO USE THIS "EXPERIMENTAL SYSTEM" TO DETERMINE WHETHER THE SEVERE AMINO ACID IMBALANCE IN THE BLOOD CAN AFFECT PROTEIN SYNTHESIS IN THE BRAIN IN SUCH A WAY SO THAT MENTAL DEVELOPMENT IS PERMANENTLY IMPAIRED.

- 1570 FACTORS INFLUENCING EXPERIMENTAL KERNICTERUS RO1 02015-03, LUCEY, JEROLD F., UNIVERSITY OF VERMONT, BURLINGTON, VT., 2/68-1/71 RENEWAL \$25,618. NICHD

THIS RESEARCH PROPOSES TO DEVELOP TECHNIQUES THAT MIGHT INCREASE THE RESISTANCE OF HUMAN INFANTS TO HYPERBILIRUBINEMIA BY A STUDY OF COMPARATIVE SUSCEPTIBILITY TO KERNICTERUS OF A FEW NEWBORN ANIMAL SPECIES. ASPHYXIA, ACIDOSIS, HYPOGLYCEMIA, HYPOALBUMINEMIA, HYPOCALCEMIA AND RESPIRATORY DISTRESS WILL BE CONSIDERED.

- 1590 FETAL AND NEONATAL DETOXIFICATION MECHANISMS RO1 02800-02 BROWN, AUDREY K., MEDICAL COLLEGE OF GEORGIA, AUGUSTA, GA., 10/67-9/71 RENEWAL, \$29,493, NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE FACTORS INFLUENCING EXCRETION OF BILIRUBIN AND TO STUDY THE FUNCTION OF EXCRETION OF BILIRUBIN AND THE RATE OF BILE FLOW IN NEWBORN ANIMALS. THE BILE WILL BE ASSESSED FOR BILIRUBIN C-14 AND BSP S-35 WHICH WILL BE INFUSED THROUGH THE FEMORAL VEIN.

- 1595 FETAL AND NEONATAL PITUITARY-THYROID PHYSIOLOGY RO1 02200-01A1, SCHINDLER, WILLIAM J, BAYLOR UNIVERSITY, HOUSTON, TEX., 9/67-8/70, INITIAL, \$26,965. NICHD

THIS STUDY WILL INVESTIGATE THE EFFECTS OF THYROXIN LEVEL DURING FETAL AND NEONATAL PERIODS ON BIOCHEMICAL, BEHAVIORAL AND PHYSIOLOGICAL DEVELOPMENT.

- 1600 FETAL DISTRESS AND ASSOCIATED PLACENTAL CHANGES RO1 00547-07 GRUENWALD, PETER, SINAI HOSPITAL OF BALTIMORE, BALTIMORE, MARYLAND 9/67-10/68, RENEWAL, \$45,726. NICHD

THIS RESEARCH CONCERNS INVESTIGATION OF PLACENTAL CHANGES IN RELATION TO FETAL OUTCOME. LOW BIRTH WEIGHT, PERINATAL DEATH, AND NEONATAL DISEASE ARE STUDIED AND BECAUSE PATHOLOGIC CHANGES IN THE PLACENTA ARE CORRELATED WITH THIS, THE LOBULAR ARCHITECTURE OF THE PLACENTA, AND THE POINTS OF ENTRY OF MATERNAL

VESSELS INTO THE INTERVILLOUS SPACE ARE INVESTIGATED.

- 1610 FETAL INSULIN AND ANTI-RH SENSITIZATION R01 02171-02, STEINKE, JURGEN, HARVARD UNIVERSITY, BOSTON, MASS., 7/67-6/68 RENEWAL, \$23,334. NICHD

THIS RESEARCH CONCERNS ELEVATED LEVELS OF ACID ETHANOL EXTRACTABLE PANCREATIC INSULIN IN FETUSES OF MOTHERS WITH DIABETES, MOTHERS TREATED WITH LARGE DOSES OF STEROIDS OR SEX HORMONES DURING PREGNANCY, AND IN BABIES WITH SEVERE ERYTHROBLASTOSIS FETALIS. THE LATTER FINDING WAS COMPLETELY UNEXPECTED AND HAS PROMPTED A DETAILED STUDY.

- 1620 FETAL LUNG FLUID R01 01275-03, ADAMS, FORREST WOOD, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., 9/67-8/68, RENEWAL, \$38,165. NICHD

THIS RESEARCH PROPOSES TO GAIN FURTHER INFORMATION REGARDING THE NORMAL PROCESSES OF THE DEVELOPMENT OF FETAL LUNG FUNCTION AND TO PERFORM EXPERIMENTS THAT WILL LEAD TO A BETTER UNDERSTANDING OF THE PATHOPHYSIOLOGY OF NEONATAL HYALINE MEMBRANE DISEASE ("IDIOPATHIC RESPIRATORY DISTRESS SYNDROME").

- 1625 FIBRINATION-FIBRINOLYSIS, PATHOGENESIS IN PREGNANCY R01 03538-04, SCHNEIDER, CHARLES LOUIS, WAYNE COUNTY GENERAL HOSPITAL, ELOISE, MICH., 5/68-4/71, INITIAL, \$28,032. NICHD

THIS RESEARCH WILL STUDY THE MANNER OF DISPOSITION OF FIBRIN WITHIN THE PULMONARY VASCULAR BED DURING FIBRINATION IN EXPERIMENTAL ANIMALS.

- 1630 FINE STRUCTURE OF ABNORMAL NEUROGENESIS R01 01922-02, McDONALD, THOMAS F., MEDICAL COLLEGE OF GEORGIA, AUGUSTA, GA., 8/67-7/69 RENEWAL, \$30,163. NICHD

THIS RESEARCH PROPOSES A BROAD STUDY OF MALFORMATIONS OF THE CENTRAL NERVOUS SYSTEM USING ELECTRON MICROSCOPY TO INVESTIGATE THE EARLY DEVELOPMENT OF MALFORMATIONS AS FOUND IN EXPERIMENTAL ANIMALS AFTER TREATMENT WITH VARIOUS TERATOGENS AND AS MAY BE SEEN IN CONCEPTI COLLECTED FROM HUMAN ABORTIONS.

- 1640 FUNCTIONAL ASPECTS OF PULMONARY IMMATURITY R01 02644-02, AULD, PETER A.M., CORNELL UNIVERSITY, NEW YORK, N.Y., 1/68-12/69 RENEWAL, \$25,932. NICHD

THIS RESEARCH PROPOSES TO DEFINE IN PHYSIOLOGIC TERMS THE LIMITS OF PULMONARY FUNCTION IN THE SMALL PREMATURE. APPLICATION OF THIS KNOWLEDGE TO THE CLINICAL PROBLEM OF RESPIRATORY INSUFFICIENCY WILL SUGGEST NEW THERAPEUTIC MANEUVERS ANTICIPATED TO IMPROVE MORTALITY AND REDUCE PHYSICAL AND MENTAL MORBIDITY IN THIS HIGH RISK GROUP.

- 1650 GENETICS OF BRAIN ANATOMY AND BEHAVIOR (1) RO1 02491-02, (2) RO1 02491-02S1, WIMER, RICHARD E., JACKSON LABORATORY, BAR HARBOR, MAINE, (1) 2/68-1/72, (2) 2/68-1/72, RENEWAL, (1) \$36,308, (2) \$9,084. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE RELATIONSHIP BETWEEN BEHAVIOR AND CHOSEN ANATOMICAL CHARACTERISTICS OF THE BRAIN. BY SELECTIVE BREEDING OF MICE, PHENOTYPIC EXTREMES IN RELATIVE AMOUNTS OF TOTAL BRAIN TISSUE, NEOCORTX, AND HIPPOCAMPUS SHALL BE PRODUCED AND ASSOCIATED CHANGES IN BEHAVIOR SHALL BE SOUGHT AND ANALYZED.

- 1660 GROWTH RETARDATION OF THE HUMAN FETUS RO1 01871-03S1, WILSON, MIRIAM G., UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIF., 6/67-5/69 RENEWAL \$4,817, NICHD

THIS RESEARCH INVOLVES THE COMPARISON OF INFANTS WITH FETAL GROWTH RETARDATION WITH INFANTS OF NORMAL BIRTH WEIGHT FOR GESTATIONAL AGE AS REGARDS NATAL BONE DEVELOPMENT, NEONATAL LINEAR BONE GROWTH, AND SUBSEQUENT GROWTH AND DEVELOPMENT DURING INFANCY AND EARLY CHILDHOOD.

- 1670 HUMAN CHROMOSOMAL ANOMALIES RO1 00062-03S2, STERNBERG, WILLIAM H., TULANE UNIVERSITY, NEW ORLEANS, LA., 9/67-12/67, RENEWAL, \$1,570. NICHD

THIS RESEARCH CONCERNS A STUDY OF ABNORMAL SEX DIFFERENTIATION IN HUMANS USING TECHNIQUES OF CHROMOSOMAL ANALYSIS, CLINICAL AND HORMONAL STUDIES, PATHOLOGIC STUDY OF SURGICAL MATERIAL AND PEDIGREE STUDIES OF AFFECTED FAMILIES. GONADAL DYSGENESIS, HERMAPHRODITISM AND TESTICULAR FEMINIZATION ARE AMONG THE DISORDERS UNDER STUDY.

- 1680 HUMAN CYTOGENETICS RO1 00358-06, PALMER, CATHERINE GARDELLA, INDIANA UNIVERSITY, BLOOMINGTON, IND., 2/68-1/69 RENEWAL, \$23,390. NICHD

THIS RESEARCH CONCERNS THE STUDY OF HUMAN CHROMOSOME BREAKAGE



AND MORPHOLOGY IN LEUKOCYTE CULTURES AND FIBROBLASTS USING PURINE AND PYRIMIDINE ANALOGS. DISTRIBUTION OF BREAKAGE IS COMPARED TO TIME OF REPLICATION AND SEGMENT OF CHROMOSOME. THE USE OF BASE ANALOGS IN INDUCING CHROMOSOME MARKERS IS BEING EXPLORED AND PATIENTS WITH MULTIPLE CONGENITAL ANOMALIES ARE BEING STUDIED.

- 1690 HYPERLYSINEMIA: STUDY OF LYSINE METABOLIC PATHWAY (1) RO1 02920-02, (2) RO1 02920-02S1, WOODY, NORMAN C., TULANE UNIVERSITY, NEW ORLEANS, LA., (1) 5/68-4/69, (2) 5/68-4/69, RENEWAL,, (1) \$18,558, (2) \$27,434. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE LOCATION OF THE METABOLIC BLOCK FOR 3 RELATED GIRLS IN WHOM THE DIAGNOSIS OF HYPERLYSINEMIA HAS BEEN MADE.

- 1700 HYPOSEMIA, ACIDEMIA AND CAPILLARY PERMEABILITY RO1 02704-02, TAYLOR, PAUL MITCHELL, MAGEE-WOMEN'S HOSPITAL, PITTSBURGH, PENNSYLVANIA 1/68-12/71, RENEWAL, \$21,847. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE RELATIVE SUSCEPTIBILITIES OF THE PULMONARY CAPILLARIES OF ADULT AND 2-WEEK-OLD DOGS TO HYPOXEMIA, ACIDEMIA AND HYPOXEMIA PLUS ACIDEMIA. A BACKGROUND FOR THE STUDY OF METHODS OF PREVENTING OR HASTENING RECOVERY FROM INCREASES IN PULMONARY CAPILLARY PERMEABILITY CAUSED BY ACUTE METABOLIC INSULTS IS ANTICIPATED.

- 1710 HYPOXIA, METABOLISM, AND NEONATAL THERMOREGULATION RO1 02531-02 BAUM, DAVID, UNIVERSITY OF WASHINGTON, SEATTLE, WASH., 10/67-9/69 RENEWAL \$14,962. NICHD

THIS RESEARCH PROPOSES TO ELICIT THE BIOCHEMICAL EFFECTS OF ACUTE AND CHRONIC HYPOXIA ON THERMOGENESIS IN THE HUMAN INFANT, AND TO EXTRAPOLATE THE FINDINGS FOR USE IN THE MEDICAL CARE OF THE HYPOXEMIC INFANT.

- 1720 INFANT PSYCHOPHYSIOLOGICAL SYSTEMS RO1 00869-06, CROWELL, DAVID H. UNIVERSITY OF HAWAII, HONOLULU, HAWAII, 9/67-8/69 RENEWAL \$64,939. NICHD

THIS RESEARCH PROPOSES TO DELINEATE DIFFERENCES IN THE BASAL LEVELS OF CENTRAL AND AUTONOMIC NERVOUS SYSTEM ACTIVITY, AND TO ESTABLISH THEIR PATTERNING, AND TO EVALUATE THE CO-VARIATIONS OF CENTRAL AND AUTONOMIC NERVOUS SYSTEM ACTIVITY AS A FUNCTION OF SPONTANEOUS BEHAVIORAL ACTIVITY CHANGES, REACTIVITY TO

SENSORY STIMULATION AND REACTIVITY TO CONDITIONS OF MINIMAL  
AND MODERATE STRESS.

- 1730 INITIATION AND CONTROL OF RESPIRATION OF TERM LAMBS R01 00239-06  
HARNED, HERBERT SPENCER, JR., UNIVERSITY OF NORTH CAROLINA, CHAPEL  
HILL, N.C., 9/67-8/68 RENEWAL \$30,136. NICHD
- THIS RESEARCH PROPOSES TO EVALUATE THE IMPORTANCE OF O<sub>2</sub> LACK,  
CO<sub>2</sub> EXCESS, AND HYDROGEN IN EXCESS IN THE INITIATION AND  
CONTROL OF BREATHING IN TERM LAMBS.
- 1740 INTERMEDIARY METABOLISM IN PREMATURE INFANTS R01 00373-12, LUBCHENCO,  
LULA O., UNIVERSITY OF COLORADO, DENVER COLO., 9/67-8/70 RENEWAL  
\$13,641. NICHD
- THIS RESEARCH CONCERNS VARIOUS ASPECTS OF INTERMEDIARY METABO-  
LISM IN WELL AND SICK NEWBORN INFANTS WITH EMPHASIS ON GLUCOSE  
UTILIZATION, INDIVIDUAL FREE FATTY ACID METABOLISM, AMINO  
ACID METABOLISM, BILIRUBIN METABOLISM IN FETUS AFFECTED WITH  
ERYTHROBLASTOSIS, AND LONG TERM FOLLOW-UP STUDIES ON PHYSICAL,  
NEUROLOGICAL AND INTELLECTUAL HANDICAPS IN NEWBORNS WITH  
SPECIAL METABOLIC PROBLEMS.
- 1760 INTESTINAL TRANSPORT OF AMINO ACIDS IN PKU R01 01796-03, YARBRO,  
MARINA T., UNIVERSITY OF MINNESOTA, MINNEAPOLIS, 7/67-6/70 RENEWAL  
\$31,675. NICHD
- THIS RESEARCH PROPOSES TO INVESTIGATE INTESTINAL ABSORPTION  
OF AMINO ACIDS IN PATIENTS WITH PHENYLKETONURIA, NORMAL CONTROLS,  
AND IN EVERTED HAMSTER INTESTINAL SAC, IN ORDER TO ATTEMPT TO  
ESTABLISH THE EXISTENCE OF A COMMON TRANSPORT MECHANISM FOR  
PHENYLALANINE, TYROSINE AND TRYPTOPHAN THAT MAY HELP TO EXPLAIN  
THE METABOLIC ABNORMALITIES ENCOUNTERED IN THIS DISEASE.
- 1770 INVESTIGATION OF THE PEPTIDES IN HUMAN SERUM AND URINE R01 02633-02  
BUIST, NEIL ROBERTSON MACK., UNIVERSITY OF OREGON, PORTLAND, ORE.,  
12/67-11/69 RENEWAL \$22,133.. NICHD
- THIS RESEARCH PROPOSES TO FURTHER THE INVESTIGATION OF THE  
PEPTIDES IN HUMAN URINE AND SERUM AND TO APPLY THE KNOWLEDGE  
ACQUIRED TO THE STUDY OF DISEASE STATES.
- 1780 ISOSENSITIZATION CAUSED BY PREGNANCY OR TRANSFUSION R01 00533-09

KRAKOWER, CECIL A., UNIVERSITY OF ILLINOIS, CHICAGO, ILL., 4/68-3/69,  
RENEWAL \$15,848. NICHD

THIS RESEARCH CONCERNS CONDITIONS THAT INHIBIT IMMUNE RESPONSES TO RED CELL ANTIGENS WITH EMPHASIS ON FORMATION OF ISOIMMUNE OR HETEROIMMUNE HEMOANTIBODIES WHEN THERE ARE TWO OR MORE ANTIGENIC DIFFERENCES BETWEEN THE IMMUNIZING RED CELLS AND THE HOST TO BE IMMUNIZED.

- 1790 LEARNING AND TRANSFER IN DISCRIMINATIONS BY RETARDATE RO1 01349-03S1  
SHEPP, BRYAN E., BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND 4/68-8/68  
RENEWAL \$4,761. NICHD

THIS RESEARCH CONCERNS STUDIES OF LEARNING AND RELATED PROCESSES IN NORMAL AND RETARDED CHILDREN AND ARE CONDUCTED IN THE CONTEXT OF VISUAL DISCRIMINATIVE SITUATIONS. A PRINCIPAL EMPHASIS IS THE STUDY OF COVERT MEDIATING RESPONSES, THE PROPERTIES OF SUCH RESPONSES AND THE VARIABLES WHICH EFFECT ACQUISITION, EXTINCTION, AND TRANSFER OF MEDIATING.

- 1800 LOWER SES CHILD REARING AND COGNITIVE DIFFERENTIATION RO1 02804-02  
DEUTSCH, MARTIN, NEW YORK UNIVERSITY, NEW YORK, N.Y., 3/68-2/70  
RENEWAL \$68,165. NICHD

THIS RESEARCH CONCERNS THE ENUMERATION AND DESCRIPTION OF COGNITIVE ABILITIES RELATED TO SCHOOL ACHIEVEMENT. PREVIOUS RESEARCH HAS DEALT WITH SUCH FACTORS AS DEVELOPMENTAL DIFFERENCES IN COGNITIVE ABILITIES AND DIFFERENCES BETWEEN SOCIOECONOMIC GROUPS.

- 1815 MECHANISM OF BILIRUBIN TOXICITY RO1 03302-04, COWGER, MARILYN L.,  
UNIVERSITY OF WASHINGTON, SEATTLE, WASH., 1/68-12/70, INITIAL,  
\$22,700. NICHD

THIS RESEARCH PROPOSES TO STUDY THE BIOCHEMICAL MECHANISMS OF TOXICITY, THE FACTORS INFLUENCING VULNERABILITY TO BILIRUBIN AND FACTORS AFFECTING ALBUMIN BINDING OF BILIRUBIN.

- 1820 METABOLIC ABNORMALITIES IN MENTAL RETARDATION RO1 03569-01, NEWCOMBE,  
DAVID S., UNIVERSITY OF VERMONT, BURLINGTON, VT., 10/67-9/69, INITIAL,  
\$39,254. NICHD

THIS RESEARCH IS A PART OF A LONG-TERM STUDY OF SECONDARY METABOLIC PATHWAYS AND TRANSPORT SYSTEMS AFFECTED BY PRIMARY METABOLIC ERRORS. A SCREENING PROGRAM FOR THE DETECTION OF THE PRIMARY DISORDERS IS BEING CONDUCTED, AND HAS PROVIDED

THE CASE MATERIAL FOR THE PRESENT STUDY OF AMINOIMIDAZOLE  
CARBOXAMIDE AND PSEUDOURIDINE METABOLISM AND OF AMINOIMIDAZOLE  
HOMOCYSTEINYLRIBOSE.

- 1830 METABOLIC AND CIRCULATORY STUDIES IN INFANTS R01 00251-07, ADAMS,  
FORREST HOOD, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., 5/68-4/70  
RENEWAL \$31,640. NICHD

THIS RESEARCH PROPOSES TO CALCULATE SYSTEMIC AND PULMONIC  
FLOWS AND TO DETERMINE THE EFFECT OF ACETYLCHOLINE ON PULMONARY  
CIRCULATION IN NORMAL TERM AND PREMATURE INFANTS AND IN INFANTS  
WITH RESPIRATORY DISTRESS AND TO DETERMINE THE OPTIMAL AMBIENT  
TEMPERATURE FOR BABIES WITH PULMONARY DISTRESS SYNDROME (HYALINE  
MEMBRANE DISEASE) AND WITH HEART DISEASE.

- 1840 METABOLIC DISORDERS AND MENTAL DEFICIENCY R01 00324-13, BERRY,  
HELEN K., CHILDREN'S HOSPITAL, CINCINNATI, OHIO, 4/68-3/70 RENEWAL  
\$61,114. NICHD

THIS RESEARCH INVOLVES STUDIES OF CHILDREN WITH HYPERGLYCINURIA  
USING C14-GLYCINE SHOWING DECREASED CONVERSION OF GLYCINE TO  
CO2; STUDIES OF PHENYLALANINE METABOLISM IN GUINEA PIGS CONSISTING  
OF PHENYLALANINE LOADING TESTS ADMINISTERED AT VARIOUS AGES BE-  
GINNING AT BIRTH, FOLLOWED BY ASSAY OF PHENYLALANINE HYDROXYLASE  
ACTIVITY IN LIVER; AND STUDIES OF PATIENTS WITH HURLER'S SYNDROME  
USING URINE FOR SEPARATION AND IDENTIFICATION OF THE MUCOPOLY-  
SACCHARIDES AND SKIN FIBROBLASTS GROWN IN TISSUE CULTURE.

- 1845 METABOLIC DISORDERS IN CHILDREN R01 02870-06, AUERBACH, VICTOR H., ST.  
CHRISTOPHERS HOSP FOR CHILDREN, PHILADELPHIA, PA., 9/67-8/70, INITIAL,  
\$52,348. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE TECHNIQUES OF DETECTION,  
DELINEATION AND TREATMENT OF DISORDERS PRIMARILY OF GENETIC ORIGIN,  
WHICH ARE MANIFEST DURING INFANCY AND CHILDHOOD.

- 1860 METABOLIC STUDIES IN MONGOLISM R01 03011-02, MCCOY, ERNEST E.,  
UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA., 10/67-9/70 RENEWAL  
\$47,777. NICHD

THIS RESEARCH PROPOSES TO DISCOVER BIOCHEMICAL DIFFERENCES BE-  
TWEEN CHILDREN WITH DOWN'S SYNDROME AND NON-AFFECTED CONTROLS;  
DETERMINE IF THE BIOCHEMICAL DIFFERENCES ARE THE RESULT OF  
TRISOMY FOR CHROMOSOME 21; DETERMINE THE MECHANISM OF BIOCHEMICAL  
DIFFERENCES OBSERVED IN THE CHILD WITH MONGOLISM; AND EXPLORE THE

RELATIONSHIP OF BIOCHEMICAL DIFFERENCES IN THE CHILD WITH DOWN'S SYNDROME TO THE PROFOUND MENTAL RETARDATION.

- 1870 METABOLISM OF DRUG SUBSTRATES BY HUMAN PLACENTA RO1 02991-02  
JUCHAU, MONT R., STATE UNIVERSITY OF NEW YORK, BUFFALO, N.Y., 5/68-  
4/70 RENEWAL \$16,867. NICHD
- THIS RESEARCH PROPOSES TO EXPLORE SYSTEMATICALLY THE CAPABILITIES OF HUMAN PLACENTAL TISSUE AT VARIOUS GESTATIONAL STAGES TO METABOLIZE DRUG SUBSTRATES. THE STUDIES ARE NEEDED BECAUSE OF POSSIBLE RELATIONSHIPS OF PLACENTAL DRUG METABOLIC PROCESS TO ABNORMAL OR UNUSUAL EFFECTS OF DRUGS ON THE PREGNANT MOTHER AND THE EFFECTS OF DRUGS ON THE FETUS AND NEWBORN.
- 1875 NEONATAL CLINICAL RESEARCH FACILITY P02 03031-01, WEDGEWOOD, RALPH J,  
UNIVERSITY OF WASHINGTON, SEATTLE, WASH., 7/67-6/69, INITIAL, \$103,450.  
NICHD
- THIS PROJECT WILL EXTEND THE CLINICAL RESEARCH POTENTIAL OF THE EXISTING CLINICAL RESEARCH CENTER TO ALLOW STUDY OF PREMATURE AND NEWLY BORN INFANTS.
- 1880 NEURO-CHEMICAL CHANGES WITH EXCESS AMINO ACIDS RO1 02301-03, WAISMAN,  
HARRY AARON, UNIVERSITY OF WISCONSIN, MADISON, WISC., 2/68-1/69 RE-  
NEWAL \$45,819. NICHD
- THIS RESEARCH FOCUSES UPON EXPERIMENTS TO MEASURE INCORPORATION OF C14 FROM LABELED AMINO ACIDS INTO PROTEINS OF BRAIN AND LIVER HOMOGENATES. INCORPORATION OF AMINO ACIDS INTO PROTEINS DISPERSED IN NON-AQUEOUS MEDIA IS A NON-BIOLOGICAL PHENOMENA, AND THE CONFIGURATION OF THE PROTEIN IS IMPORTANT IN DETERMINING THE EXTENT OF THE INCORPORATION.
- 1890 NEWBORN SERUM PROTEIN AND IMMUNOLOGICAL ABNORMALITIES RO1 01121-03S1  
THURMAN, WILLIAM G., UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VA.,  
1/67-12/67 RENEWAL \$572. NICHD
- THIS RESEARCH CONCERNS IMMUNOLOGIC ABNORMALITIES IN INFANTS AS RELATED TO THEIR IMMUNOGLOBULIN PATTERNS. RELATIONSHIPS TO PROBLEMS OF LOW BIRTH WEIGHT AND DEVELOPMENT OF ANEMIA ARE NEW PARAMETERS UNDER STUDY.
- 1910 NUTRITION AND GROWTH OF MENTALLY RETARDED CHILDREN RO1 00088-05

CULLEY, WILLIAM J., MUSCATATUCK STATE SCHOOL, BUTLERVILLE, INDIANA  
1/68-12/68 RENEWAL \$22,435. NICHD

THIS RESEARCH PROPOSES TO DETERMINE TO WHAT DEGREE CALORIC NEEDS OF MENTALLY RETARDED CHILDREN ARE AFFECTED BY THEIR FREQUENTLY SHORT STATURE FOR THEIR AGE AND MOTOR PROBLEMS. IT IS ALSO PROPOSED TO STUDY WHAT FACTORS MIGHT CONTRIBUTE TO THEIR SHORT STATURE WITH PARTICULAR ATTENTION TO BE PAID TO ENDOCRINE FUNCTION.

- 1915 ONTOGENY OF VISUAL AND AUDITORY EXPLORATION IN INFANTS RO1 03386-01,  
SIQUELAND, FINAR R., BROWN UNIVERSITY, PROVIDENCE, R.I., 2/68-1/71,  
INITIAL, \$47,101. NICHD

THE PURPOSE OF THIS RESEARCH IS TO INVESTIGATE THE DEVELOPMENT OF VISUAL AND AUDITORY EXPLORATION IN NEUROLOGICALLY SUSPECT AND ABNORMAL INFANTS THROUGH ONTOGENETIC STUDIES OF VISUAL AND AUDITORY REINFORCEMENT.

- 1920 PATHOGENESIS OF CENTRAL NERVOUS SYSTEM MALFORMATIONS RO1 01503-04  
CHAMBERLAIN, JACK G., UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIF.,  
6/68-5/71 RENEWAL \$30,156. NICHD

THIS RESEARCH PROPOSES TO STUDY THE DEVELOPMENT OF ABNORMALITIES SUCH AS HYDROCEPHALUS CAUSED BY ACUTE OR CHRONIC NIACIN DEFICIENCY IN PREGNANT RATS AND THE EFFECTS OF NIACIN DEFICIENCY INSTITUTED EARLY IN GESTATION. THESE STUDIES WILL BE COMPARED AND CONTRASTED WITH OTHER DIETARY DEFICIENCIES KNOWN TO BE TERATOGENIC IN MAMMALS.

- 1925 PATHOGENESIS OF CHRONIC INFECTIONS PO1 03693-01, KASS, EDWARD H., HARVARD  
UNIVERSITY, BOSTON, MASS., 6/68-5/72, INITIAL, \$165,738. NICHD

THIS RESEARCH IS CONCERNED WITH APPLYING A WIDE RANGE OF MEDICAL CONCEPTS TO THE PREVENTION OF CHRONIC DISEASE. BACTERIURIA IN PREGNANCY WILL BE STUDIED. A TEN-YEAR FOLLOW-UP STUDY OF THE EFFECT OF BACTERIURIA IN INFLUENCING BLOOD PRESSURE WILL BE DONE.

- 1930 PERCEPTUAL DEVELOPMENT AS RELATED TO READING PROGRESS, (1) RO1 02090-02S1  
(2) RO1 02090-03, RUDNICK, MARK, UNIVERSITY OF COLORADO, DENVER, COLO.,  
(1) 1/68-4/69, (2) 5/68-4/69, RENEWAL, (1) \$3,516, (2) \$28,605. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE RELATIONSHIP OF PERCEPTUAL DEVELOPMENT TO READING PROGRESS IN ELEMENTARY SCHOOL AGE CHILDREN. THE RESEARCH IS DESIGNED TO MAKE A MORE ADEQUATE TEST OF THE HYPOTHESIS THAT AUDITORY-VISUAL TRANSPOSITION IS RELATED TO READING.

AND TO DETERMINE THAT ADVANCES IN THIS ABILITY PRECEDE ADVANCES IN LEARNING TO READ, RATHER THAN THE REVERSE.

- 1960 PERINATAL VASCULAR CAUSES OF NEONATAL ATELECTASIS RO1 02406-02  
BARKER, JUNE NORTHROP, NEW YORK UNIVERSITY, NEW YORK, N.Y., 1/68-  
12/69 RENEWAL \$27,004. NICHD

THIS RESEARCH CONCERNS PULMONARY MORPHOMETRIC AND HEMODYNAMIC PARAMETERS MEASURED IN PREMATURE AND TERM RATS, RABBITS AND GUINEA PIGS IN ORDER TO TEST THE VALIDITY OF THE FOLLOWING WORKING HYPOTHESIS: NON-OPTIMAL TISSUE TURGIDITY AND LOCAL UNEVENNESS OF TISSUE TURGIDITY AT THE MOMENT OF BIRTH ARE CONSIDERED TO BE THE FINAL COMMON PATHWAY TO NEONATAL ATELECTASIS.

- 1970 PERSISTENCE OF STRESS EFFECTS AS A FUNCTION OF AGE RO1 02398-02  
RICCIO, DAVID C., KENT STATE UNIVERSITY, KENT, OHIO, 9/67-8/68 RENEWAL  
\$12,235. NICHD

THIS RESEARCH AIMS TO DETERMINE THE PERMANENCE OF BEHAVIORAL AND PHYSIOLOGICAL MODIFICATIONS ELICITED BY CONTROLLED TRAUMATIC EXPERIENCE AT DIFFERENT STAGES OF AN ANIMAL'S DEVELOPMENT BY A SERIES OF EXPERIMENTS TO MEASURE THE ACQUISITION AND RETENTION OF INCREASED TOLERANCE TO A REPEATED STRESSOR AS A FUNCTION OF AGE.

- 1980 PHENYLALANINE AND TRYPTOPHAN HYDROXYLATION IN PKU RO1 02643-02  
HSIA, DAVID YI-YUNG, CHILDREN'S MEMORIAL HOSPITAL, CHICAGO, ILLINOIS,  
12/67-11/69 RENEWAL \$16,525. NICHD

THIS RESEARCH PROPOSES TO DEFINE MORE PRECISELY THE NATURE OF THE ENZYME DEFECT IN PHENYLKETONURIA AND RELATED DISTURBANCES IN THE LIGHT OF THE MORE RECENTLY ACQUIRED INFORMATION ON THE HYDROXYLATION OF PHENYLALANINE AND TRYPTOPHAN IN THE LIVER AND BRAIN.

- 1990 PHENYLALANINE METABOLISM IN PHENYLKETONURIA RO1 00774-05, GRUENER,  
HANNS-DIETER, OHIO STATE UNIVERSITY, COLUMBUS, OHIO, 1/68-12/68 RE-  
NEWAL \$18,927. NICHD

THIS RESEARCH CONCERNS A STUDY TO BE MADE OF DISTRIBUTION AND TRANSPORT OF AMINO ACIDS IN LOWER ANIMALS AFFLICTED WITH AN ACCUMULATION DISEASE. THE EFFECT OF HIGH CONCENTRATIONS OF AMINO ACIDS AND EVENTUALLY CARBOHYDRATES ON TISSUE METABOLISM AND IN PARTICULAR ON BRAIN, WILL BE STUDIED.

- 2000 PHOSPHOLIPID METABOLISM DURING DEVELOPMENT RO1 02871-02, WEINHOLD,

PAUL A., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH., 5/68-4/70 RENEWAL \$16,116. NICHD

THIS RESEARCH PROPOSES TO DESCRIBE THE PHOSPHOLIPID METABOLISM OF LIVER AND LUNG DURING THEIR FUNCTIONAL DEVELOPMENT IN THE RAT.

- 2010 PHYSIOLOGICAL ASPECTS OF PLACENTAL PERMEABILITY R01 01683-03  
PRYSTOWSKY, HARRY, UNIVERSITY OF FLORIDA, GAINESVILLE, FLA., 8/67-7/68 RENEWAL \$20,267. NICHD

THIS RESEARCH CONCERNS QUANTITATIVE OBSERVATIONS OF THE TRANSPLACENTAL EXCHANGE OF RESPIRATORY AND ANESTHETIC GASES, AND A STUDY OF THE EFFECTS OF STRESS UPON THE PERMEABILITY CHARACTERISTICS OF THE CHORIONIC MEMBRANE. MEASUREMENTS OF OXYGEN AND ACID-BASE VALUES IN THE BLOODS OF APNEIC INFANTS HAVE BEEN MADE DURING RESUSCITATION.

- 2020 PHYSIOLOGIC STUDIES IN NEWLY BORN HUMAN INFANTS R01 00747-06, OLIVER, THOMAS K., JR., UNIVERSITY OF WASHINGTON, SEATTLE, WASH., 12/67-11/72 RENEWAL \$26,328. NICHD

THIS RESEARCH INVOLVES STUDIES OF THERMOREGULATION, ACID-BASE BALANCE IN HEALTH AND DISEASE, STUDIES OF INFANTS OF LOW BIRTHS WEIGHT AND OF THE ALTERATION IN BODY FLUID COMPARTMENTS OF INFANTS BORN BY ELECTIVE CAESAREAN SECTION AS COMPARED TO THOSE BORN VAGINALLY.

- 2040 PLACENTAL EXCHANGE, PARTICULARLY WITH O<sub>2</sub> AND CO R01 01860-03, FOSTER, ROBERT E., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA., 1/68-12/70 RENEWAL \$18,310. NICHD

THIS RESEARCH CONCERNS THE STUDY OF NON-UNIFORM DISTRIBUTION OF MATERNAL AND FETAL PLACENTAL BLOOD FLOW BY MEASURING THE PLACENTAL EXCHANGE OF INERT GASES, AND BY MEASURING THE VALUE OF THE PARTIAL PRESSURE OF OXYGEN IN THE UTERINE AND UMBILICAL VENULES DRAINING INDIVIDUAL COTYLEDONS IN SHEEP.

- 2050 PREGNANCY ISOIMMUNIZATION IN THE MOUSE, (1) R01 01287-05S1, (2) R01 01287-06, GOODLIN, ROBERT C., STANFORD UNIVERSITY, STANFORD, CALIF., (1) 1/67-12/67, (2) 1/68-12/69, RENEWAL, (1) \$727, (2) \$45,034. NICHD

THIS RESEARCH PROPOSES TO STUDY THE EFFECTS OF IMMUNIZATION OF MATERNAL MICE TO PATERNAL GAMMAGLOBULIN ISOANTIGENS ON YOUNG



MICE. USING AN ISOTOPICALLY LABELED ANTIGEN GAMMA GLOBULIN LEVELS OF YOUNG MICE ARE DETERMINED AFTER EITHER IN UTERO OR NURSING EXPOSURE TO ANT<sub>1</sub>-ALLOTYPE ANTIBODY.

- 2060 PRENATAL STIMULATION OF CORTICAL-NEURON PROLIFERATION R01 01909-03  
ZAMENHOF, STEPHEN, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF.,  
2/68-1/70 RENEWAL \$27,079. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE POSSIBILITY OF EXPERIMENTAL INCREASE IN THE NUMBER OF CORTICAL NEURONS BY INJECTING PITUITARY GROWTH HORMONE DURING PRENATAL PERIOD (PREGNANT RATS), I.E., BEFORE THESE NEURONS CEASE TO DIVIDE. PRELIMINARY EXPERIMENTS DEMONSTRATE THE FEASIBILITY OF SUCH A PROJECT. THE TREATED ANIMALS (RATS) AT MATURITY SHOWED ALSO AN INDICATION OF IMPROVED LEARNING ABILITY.

- 2080 RED CELL CHANGES AND NEWBORN HYPERBILIRUBINEMIA R01 02298-05, BENTLEY,  
HERSCHEL P., UNIVERSITY OF ALABAMA, BIRMINGHAM, ALA., 1/68-12/68  
RENEWAL \$12,985. NICHD

THIS RESEARCH AIMS TO EXAMINE GLYCOLYSIS IN THE RED CELL OF THE HUMAN NEWBORN TERM AND PREMATURE INFANT AND TO SEE EXACTLY WHERE THE DEVIATIONS FROM THE NORMAL ADULT CELL OCCUR.

- 2090 RESEARCH PROGRAM OF RETARDED INTELLECTUAL DEVELOPMENT P01 00973-05  
DUNN, LLOYD M., GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENN.,  
6/68-5/71 RENEWAL \$246,779. NICHD

THIS RESEARCH FOCUSES UPON ORAL AND WRITTEN LANGUAGE DEVELOPMENT OF THE CULTURALLY AND MENTALLY RETARDED; THE ASSESSMENT OF THE EFFECTS OF VARIOUS REINFORCEMENT SCHEDULES; DISCRIMINATION AND LEARNING ASSOCIATIVE AND MEDIATION PROCESSES; THE SOCIAL ADJUSTMENT OF THE RETARDATE; SOCIAL REFERENTS OF INSTITUTIONALIZED RETARDATE; AND PSYCHO-MOTOR DEVELOPMENT OF RETARDED CHILDREN IN THE COMMUNITY.

- 2100 RESPIRATORY STUDIES IN THE NEWBORN PERIOD R01 00281-08, AVERY,  
MARY ELLEN, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD., 9/67-8/68 RE-  
NEWAL \$22,120. NICHD

THIS RESEARCH CONCERNS STUDIES ON ACID-BASE CHANGES IN SPINAL FLUID OF EXTERIORIZED FETAL LAMBS. THE TIME COURSE OF CHANGES IN PH DURING INDUCED ALKALOSIS AND ACIDOSIS WILL BE MEASURED AND RELATED TO RESPIRATORY ACTIVITY. THE EFFECTS OF RATES OF CHANGE IN H<sup>+</sup> CONCENTRATION IN BLOOD AND SPINAL FLUID ON RESPIRATION WILL

BE INVESTIGATED.

- 2120 SALIVARY GLAND PHYSIOLOGY IN MONGOLISM R01 02305-03, WINER, RICHARD A., TUFTS UNIVERSITY, BOSTON, MASS., 2/68-1/69 RENEWAL \$21,608. NICHD

THIS RESEARCH CONCERNS SALIVARY METABOLISM IN MENTALLY RETARDED PERSONS. ELECTROLYTE COMPOSITION, PH, AND SECRETORY RATES OF PAROTID AND SUBMANDIBULAR SALIVA WERE OBTAINED FROM APPROXIMATELY 15 MONGOLOID PATIENTS AT WALTER E. FERNALD STATE SCHOOL IN WAVERLY, MASS. FURTHER SAMPLES OF SALIVA WILL BE COLLECTED FROM NON-MONGOLOID MENTALLY RETARDED AND NORMAL INDIVIDUALS AND THE RESULTANT DATA WILL BE COMPARED.

- 2130 SHORT-TERM MEMORY IN THE RETARDED CHILD R01 02898-02, SCOTT, KEITH G., UNIVERSITY OF ILLINOIS, URBANA, ILL., 6/68-5/70 RENEWAL \$21,366 NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE CAUSES OF INTERFERENCE IN CHILDREN'S SHORT-TERM MEMORY AND SEE HOW THIS RELATES TO INTELLIGENCE AND DEVELOPMENT. THE RESULTS SHOULD GIVE FURTHER SCIENTIFIC INFORMATION ABOUT DEVELOPMENT OF PROCEDURES AND CONTRIBUTE TO THE TRAINING AND MANAGEMENT OF THE RETARDED.

- 2140 STEROID METABOLISM DURING GROWTH AND MATURATION, (1) R01 00371-13S2, (2) R01 00371-14, BONGIOVANNI, ALFRED M., CHILDREN'S HOSPITAL OF PHILADELPHIA, PHILADELPHIA, PA., (1) 8/67-8/68, (2) 9/67-8/68, RENEWAL, (1) \$3,172, (2) \$53,119. NICHD

THIS RESEARCH CONCERNS ASSAYS FOR GROWTH HORMONE AND INSULIN IN PLASMA OF NORMAL CHILDREN AND OF CHILDREN WITH ILLNESS. IT IS PLANNED TO ESTABLISH AN ASSAY FOR ADRENOCORTICOTROPHIC HORMONE AND THEN TO DEFINE THOSE PHYSIOLOGIC STIMULI WHICH CONTROL THE SECRETION AND RELEASE OF THESE HORMONES IN HEALTHY CHILDREN AND COMPARE THESE FINDINGS WITH THE STUDY OF CHILDREN WITH VARIED DISEASES.

- 2150 STIMULUS FACTORS IN VERBAL LEARNING OF RETARDATEES, (1) R01 02588-02S1, (2) R01 02588-03, BAUMEISTER, ALFRED A., UNIVERSITY OF ALABAMA, BIRMINGHAM, ALA., (1) 2/68-5/68, (2) 6/68-5/71, RENEWAL, (1) \$3,800, (2) \$24,814. NICHD

NO ABSTRACT SUPPLIED

- 2160 STUDIES IN EXPERIMENTAL ERYTHROBLASTOSIS FETALIS R01 01385-04

JACKSON, BENJAMIN T., BOSTON UNIVERSITY, BOSTON, MASS., 1/68-12/72  
RENEWAL \$54,778. NICHD

THIS RESEARCH CONCERNS THE DEVELOPMENT AND FURTHER STUDY AND  
DEFINITION OF AN ANIMAL MODEL FOR IN UTERO FETAL HEMOLYTIC  
DISEASE, AND WILL BE CARRIED OUT IN DOGS AND BASED UPON THE PRE-  
VIOUSLY WELL DESCRIBED BLOOD GROUP SYSTEMS IN THAT SPECIES.

- 2170 STUDIES IN HUMAN GENETICS RO 1 00486-13, CHILDS, BARTON, JOHNS HOPKINS  
UNIVERSITY, BALTIMORE, MD., 10/67-9/68 RENEWAL, \$34,185. NICHD

THIS RESEARCH CONCERNS CYTOGENETIC STUDIES OF PATIENTS WITH  
CHROMOSOME ABNORMALITIES, ENZYME VARIATIONS IN DROSOPHILA, AND  
STUDY OF LIPID METABOLISM IN A PATIENT WITH HYPERGLYCINEMIA.

- 2180 STUDIES OF COGNITIVE FUNCTION IN TURNER'S SYNDROME RO1 01716-03  
GARRON, DAVID C., PRESBYTERIAN-ST. LUKE'S HOSPITAL, CHICAGO, ILL.,  
9/67-8/69 RENEWAL \$17,328 NICHD

THIS RESEARCH PROPOSES A STUDY OF INTELLECTUAL FUNCTIONING IN  
PERSONS WITH TURNER'S SYNDROME, A GROUP OF ANATOMIC ANOMALIES  
TRACED TO CHROMOSOMAL ABERRATIONS. TO LEARN MORE OF THE NATURE  
AND DEVELOPMENT OF SPECIAL DISORDERS AND TO CORRELATE A DELIMITED  
INTELLECTUAL IMPAIRMENT WITH A SPECIFIC CHROMOSOMAL ABERRA-  
TION IS ANTICIPATED.

- 2190 STUDIES OF NEONATAL BLOOD DISORDERS RO1 00254-08, BERNSTEIN, SELDON  
E., JACKSON LABORATORY, BAR HARBOR, ME., 12/67-11/70 RENEWAL  
\$28,800. NICHD

THIS RESEARCH PROPOSES TO OBTAIN INFORMATION ON THE NATURE OF  
THE REGULATORY MECHANISMS THAT CONTROL HEMATOPOIESIS, THROUGH  
AN ANALYSIS OF ACTION OF MUTANT GENES WHICH ALTER THE NORMAL  
GROWTH AND DEVELOPMENT OF BLOOD-FORMING TISSUE. SEVEN OF THE  
11 KNOWN HEREDITARY ANEMIAS OF MICE ARE CURRENTLY UNDER STUDY.

- 2195 STUDIES ON THE RESPIRATORY DISTRESS SYNDROME RO1 03554-01, CROPP, GERALD J.,  
UNIVERSITY OF COLORADO, DENVER, COLO., 5/68-4/71, INITIAL, \$21,099.  
NICHD

THIS RESEARCH PROPOSES TO APPLY THERMAL DILUTION TECHNIQUES TO THE  
QUANTITATIVE STUDY OF SHUNTS IN THE CIRCULATION SYSTEM. USING THESE  
TECHNIQUES THE EFFECTS OF VARIOUS FORMS OF THERAPY CAN BE EVALUATED.

- 2200 STUDY OF MEIOSIS IN RELATION TO MENTAL RETARDATION RO1 01343 -04.

MELNYK, JOHN, CHILDREN'S HOSPITAL OF LOS ANGELES, LOS ANGELES, CALIF.,  
4/68-3/70 RENEWAL, \$29,023. NICHD

THIS RESEARCH PROPOSES TO EXAMINE THE MEITOC CHROMOSOMES OF RETARDED INDIVIDUALS WITH AND WITHOUT ANATOMICAL CONGENITAL MALFORMATIONS, WHO DO NOT DEMONSTRATE MITOTIC CHROMOSOMAL ABBERATIONS.

- 2220 THE INFANTS VOCALIZATIONS R01 00332-10, KARELITZ, SAMUEL, LONG ISLAND JEWISH HOSPITAL, NEW HYDE PARK, N.Y., 4/68-3/70 RENEWAL, \$22,395. NICHD

THIS RESEARCH PROPOSES TO DETERMINE WHETHER EARLY CRYING ACTIVITY AND OTHER SUBSEQUENT VOCALIZATIONS ARE DIAGNOSTIC OF THE CURRENT STATUS OF THE CHILD'S CENTRAL NERVOUS SYSTEM AND WHETHER THEY ARE PREDICTIVE OF HIS FUTURE INTELLECTUAL AND SPEECH DEVELOPMENT.

- 2240 TISSUE HEPARIN LEVELS IN FETUS AND NEWBORN R01 00665-05S1, REINER, CHARLES B., OHIO STATE UNIVERSITY, COLUMBUS, OHIO, 7/67-10/68, RENEWAL, \$1,854. NICHD

THIS RESEARCH INVOLVES THE ASSAY OF SAMPLES OF LUNG, LIVER, KIDNEY AND PLACENTA OBTAINED FROM HUMANS AT AUTOPSY FOR HEPARIN-LIKE ACTIVITY IN ORDER TO ESTABLISH A DEVELOPMENTAL PATTERN AND ASSESS POSSIBLE RELATIONSHIP TO PATHOGENESIS OF DISEASE.

- 2260 TRANSPLACENTAL PASSAGE OF FETAL ERYTHROCYTES R01 00505-09, COHEN, FLOSSIE, CHILD RESEARCH CENTER OF MICHIGAN, DETROIT, MICH., 4/68-3/70 RENEWAL, \$47,720. NICHD

THIS RESEARCH CONCERNS THE TRANSPLACENTAL PASSAGE OF FETAL CELLS AND ITS RELATIONSHIP TO ISOIMMUNIZATION OF PREGNANCY. SEVERAL WOMEN ARE BEING STUDIED DURING CONSECUTIVE PREGNANCIES. PREVIOUSLY SENSITIZED WOMEN REQUIRING AMNIOCENTESIS AND THE MORE SEVERE ONES WHERE THE INFANTS REQUIRE INTRAUTERINE TRANSFUSION ARE INCLUDED IN THE STUDY.

- 2270 ULTRASTRUCTURAL STUDIES IN MAMMALIAN TERATOGENESIS. R01 02616-02 FERM, VERGIL H., DARTMOUTH COLLEGE, HANOVER, N.H., 2/68-1/70 RENEWAL \$27,400. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE SEQUENTIALLY THE FINE STRUCTURAL ALTERATIONS IN PLACENTAL AND SELECTED EMBRYONIC TISSUES FOLLOWING THE INTRODUCTION OF KNOWN TERATOGENIC AND EMBRYONIC AGENTS INTO THE PREGNANT LABORATORY ANIMAL. THE USE OF

SPECIFIC AGENTS AND TECHNIQUES ADAPTABLE TO ELECTRON MICROSCOPIC INVESTIGATION WILL CONSTITUTE THE EXPERIMENTAL BASIS FOR THESE OBJECTIVES.

- 2280 ULTRASTRUCTURAL STUDIES OF THE LUNG RO2 02459-01, KIKKAWA, YUTAKA, YESHIVA UNIVERSITY, NEW YORK, N.Y., 9/67-8/69 RENEWAL \$28,975. NICHD

THIS RESEARCH CONCERNS A COMBINED BIOCHEMICAL AND MORPHOLOGICAL STUDY USING RADIOACTIVE PALMITIC ACID TO ASSESS: THE PATHWAY OF PALMITATE IN THE LUNG, PARTICULARLY IN TYPE II EPITHELIAL CELL; THE RELATIONSHIP OF MITOCHONDRION AND INCLUSION BODY; AND THE CHEMICAL NATURE OF THE INCLUSION BODY AND THE SURFACE LINING LAYER.

- 2285 UPTAKE OF AMINO ACIDS BY THE FETUS OF THE EWE RO1 03255-01A1, CURET, LUIS B., UNIVERSITY OF WISCONSIN, MADISON, WISC., 5/68-4/72, INITIAL, \$27,329. NICHD

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE UTERINE AND UMBILICAL BLOOD FLOW AND OXYGEN AND AMINO ACID METABOLISM IN THE PREGNANT EWE.

- 2290 URINARY TAURINE AND SERUM URIC ACID IN MONGOLISM RO1 02206-03; GOODMAN, HAROLD O., WAKE FOREST UNIVERSITY, WINSTON-SALEM, NORTH CAROLINA 6/68-5/69 RENEWAL, \$15,490. NICHD

THIS RESEARCH INVOLVES A SEARCH FOR LINKAGE OF LOCI REGULATING MORPHOLOGICAL AND BIOCHEMICAL TRAITS IN MONGOLISM TO CHROMOSOME 21. SINCE EXCRETION OF URINARY TAURINE AMONG MOST MONGOLOIDS HAS BEEN SHOWN TO BE BELOW LEVELS FOUND IN NON-MONGOLOID SUBJECTS, STUDIES AIMED AT ELUCIDATING THE METABOLIC BASIS FOR THE OBSERVED DIFFERENCE INCLUDE LOADING STUDIES USING TAURINE AND PRE-TAURINE METABOLIC PRECURSORS, TRACER AND CLEARANCE STUDIES.

- 2300 VALUE OF CONTINUOUS FETAL HEART MONITORING IN LABOR RO1 01700-03; SEITCHIK, JOSEPH N., SINAI HOSPITAL OF BALTIMORE, BALTIMORE, MD.; 2/68-6/68 RENEWAL, \$8,072. NICHD

THIS RESEARCH CONCERNS CONTINUOUS MONITORING OF UTERINE CONTRACTIONS AND FETAL HEART DURING LABOR TO: EVALUATE PRACTICES IN ASSESSMENT OF FETAL DISTRESS; DEFINE THE IF AND WHEN OF CONTINUOUS FETAL HEART MONITORING; EVALUATE THE HEALTH OF THE FETUS IN LABOR; DEVELOP EQUIPMENT FOR OBTAINING THE DATA; AND EVALUATE SPECIAL TECHNIQUES FOR RETRIEVAL OF LABOR DATA.

- 2310 WORD ASSOCIATION NORMS -- ADOLESCENT RETARDATE RO1 01706-02

SPITZ, HERMAN H., TRAINING AND RESEARCH CENTER, BORDENTOWN,  
NEW JERSEY, 7/67-12/68, RENEWAL, \$22,682. NICHD

THIS RESEARCH PROPOSES TO OBTAIN WORD ASSOCIATION NORMS FOR MIDDLE- AND HIGH-GRADE MENTAL RETARDATE OF BOTH SEXES FOR AGES RANGING FROM 11 TO 19 AND COMPARE THE OBTAINED NORMS WITH EACH OTHER AND WITH CORRESPONDING NORMS OBTAINED FOR NORMAL CHILDREN TO DETERMINE HOW SEX, MENTAL AGE, IQ, AND CHRONOLOGICAL AGE AFFECT WORD ASSOCIATION.

- 2330 NEUROPATHOLOGY IN MENTAL ILLNESS AND DEFICIENCY MH-8603-04; WOODWARD, JOHN S., CAMARILLO STATE HOSPITAL, CAMARILLO, CALIF., 1/68 RENEWAL \$40,027. NIMH

THIS RESEARCH INTENDS TO DEFINE BETTER THE INCIDENCE OF EACH MORPHOLOGIC CRITERION OF BRAIN ABNORMALITY AND THE SPECIFIC RELATIONSHIP IF ANY TO MENTAL DISORDER. A PRACTICAL METHOD WILL BE DEVELOPED FOR ROUTINE EXAMINATION OF THE BRAIN IN CASES OF MENTAL DISORDER, ESPECIALLY IN THE ABSENCE OF GROSS PATHOLOGY. THIS STUDY IS DESIGNED FOR THE PROCUREMENT OF SELECTED AND MORPHOLOGICALLY EVALUATED BRAIN TISSUES FOR SPECIAL STUDIES INCLUDING BIOCHEMICAL ANALYSIS.

- 2355 BILIRUBIN METABOLISM IN NEONATAL LIVER AND BRAIN, 5841-04, SCHENKER, STEVEN, UNIVERSITY OF TEXAS SOUTHWEST MEDICAL SCHOOL, DALLAS, TEXAS, 9/67-8/68, RENEWAL, \$29,239. NINDS

THIS RESEARCH PROPOSES TO STUDY THE INTERFERENCE WITH CEREBRAL ENERGY METABOLISM DUE TO EXCESS NH<sub>3</sub> AS A CAUSE OF HEPATIC ENCEPHALOPATHY.

- 2360 BIOCHEMICAL STUDIES OF MYELINATION 5300-05; MCKHANN, GUY M., STANFORD UNIVERSITY SCHOOL OF MEDICINE, PALO ALTO, CALIF.; 5/68-4/69 RENEWAL, \$23,197. NINDS

THIS RESEARCH FOCUSES ON THE SYNTHESIS OF INDIVIDUAL MYELIN LIPIDS AND THE TRANSPORT FROM THEIR SITE OF SYNTHESIS TO THE MYELIN SHEATH. SULFATIDES, THE 3'-SULFATE ESTERS OF GALACTOCEREBROSIDES, ARE LIPID COMPONENTS OF THE MYELIN SHEATH AND WILL BE INVESTIGATED IN TERMS OF SYNTHESIS, INTRACELLULAR LOCATION, AND TRANSPORT AS A LIPOPROTEIN IN BRAIN.

- 2370 BIOCHEMISTRY OF SPHINGOSINE AND SPHINGOLIPIDS 6770-02; MOSCATELLI, EZIO A., UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL SCHOOL, DALLAS, TEXAS; 9/67-8/68 RENEWAL, \$14,531 NINDS

THIS RESEARCH FOCUSES UPON SPHINGOSINE BASE COMPOSITIONS AND OTHER COMPOSITIONAL DATA TO BE ACCUMULATED ON SPHINGOLIPIDS OF NORMAL MATURE, NORMAL IMMATURE, AND DISEASED HUMAN BRAIN. SIMILAR STUDIES WILL BE MADE OF SPHINGOLIPIDS OF NERVOUS AND OTHER TISSUES OF VARIOUS SPECIES.

- 2373 BIOMEDICAL CENTER FOR CLINICAL NEUROLOGICAL DISORDERS 4613-05, ROWLAND, LEWIS P., UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE, PHILADELPHIA, PA., 10/67-9/68, RENEWAL, \$23,790. NIND8

THIS PROJECT PROVIDES CLINICAL FACILITIES, LABORATORIES AND PERSONNEL FOR THE INTENSIVE STUDY OF SELECTED PATIENTS WITH NEUROLOGICAL DISORDERS.

- 2375 BRAIN BARRIER SYSTEM MECHANISMS FOR AMINO ACIDS 4360-06, LAJTHA, ABEL, RESEARCH FOUNDATION FOR MENTAL HYGIENE, INC., ALBANY, N.Y., 1/68-12/68, RENEWAL, \$35,445. NIND8

THE PURPOSE OF THIS RESEARCH IS TO INVESTIGATE THE BASIC MECHANISMS OF AMINO ACID TRANSPORT AND THE MECHANISMS BY WHICH TRANSPORT IS ALTERED.

- 2380 BRAIN FUNCTION AND THE METABOLISM OF MACROMOLECULES 7457-02; WILSON, JOHN E., UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE, CHAPEL HILL, N.C.; 3/68-2/69 RENEWAL, \$43,588. NIND8

THIS RESEARCH PROPOSES TO DETERMINE THE INFLUENCE OF ENVIRONMENTAL CHANGES, AND OF RESPONSES TO THESE CHANGES, ON THE METABOLISM OF MACROMOLECULES OF THE CENTRAL NERVOUS SYSTEM. THE ULTIMATE GOAL IS TO DETERMINE THE FUNCTIONS OF RNA AND PROTEIN IN LEARNING, MEMORY, HABITUATION, IMPRINTING AND MOTIVATION.

- 2390 BRAIN FUNCTIONS IN METABOLIC DISORDERS, (1) 4928-04, (2) 4928-04S1, (3) 4928-04S2, POSNER, JEROME B., CORNELL UNIVERSITY MEDICAL COLLEGE, NEW YORK, N.Y., (1) 12/66-8/68, (2) 12/67-4/68, (3) 5/68-8/68, RENEWAL, (1) \$31,209, (2) \$13,002, (3) \$10,407. NIND8

THIS RESEARCH PROPOSES TO INVESTIGATE IN METABOLIC DISEASES RELATIONSHIPS BETWEEN THE BRAIN'S BEHAVIORAL, ELECTRICAL AND BIO-CHEMICAL FUNCTION AND SYSTEMIC CHEMICAL ABNORMALITIES.

- 2400 CEREBRAL ENZYMES IN NORMAL AND CONVULSIVE STATES; (1) 6294-02S1,

(2) 6294-03, SELLINGER, O.Z., UNIVERSITY OF MICHIGAN SCHOOL OF MEDICINE, ANN ARBOR, MICH., (1) 1/68-5/68, (2) 6/68-5/69, RENEWAL, (1) \$14,446, (2) \$60,128. NIND8

THIS RESEARCH INVOLVES DELINEATION OF THE MODE OF ATTACHMENT OF CEREBRAL GLUTAMINE SYNTHETASE TO SUBCELLULAR MEMBRANES; INVESTIGATING, THE DIVERSITY IN SUBCELLULAR LOCALIZATION OF CEREBRAL LYSOSOMAL HYDROLASES; AND STUDY OF THE MECHANISMS WHEREBY METHIONINE SULFOXIMINE, A CONVULSANT WITH PERIODIC ACTION INACTIVATES THE ENZYME GLUTAMINE SYNTHETASE.

2405 CORRELATIVE REFLEX STUDIES IN MAN AND ANIMALS 367-18, MAGLADERY, J.W., JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, BALTIMORE, MD., 8/67-4/69, RENEWAL, \$6,863. NIND8

THIS RESEARCH IS CONCERNED WITH THE INTEGRATIVE MECHANISMS ASSOCIATED WITH MYOTATIC AND CUTANEOUS REFLEX ACTIVITY IN ORDER TO UNDERSTAND FEATURES OF TONE, POSTURE AND VOLUNTARY AND INVOLUNTARY MOVEMENT AND THEIR ALTERATION IN DISEASE, DEVELOPMENT AND AGING.

2410 CORTICAL DENDRITES, (1) 7870-01, (2) 7870-0151, COLEMAN, PAUL, UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY, ROCHESTER, N.Y., (1) 9/67-12/68, (2) 6/68-12/68, INITIAL, (1) \$16,803, (2) \$4,983. NIND8

THIS RESEARCH FOCUSES UPON BRAINS OF S1 (MAZE-BRIGHT) AND S3 (MAZE-DULL) RATS STAINED ACCORDING TO THE GOLGI-COX METHOD. THE RATS WERE PREVIOUSLY TESTED IN THE HEBB-WILLIAMS MAZE AND LASHLEY MAZE. BRAINS OF RATS REARED IN THE DARK HAVE BEEN STAINED ACCORDING TO THE GOLGI-COX METHOD. DENDRITES OF INDIVIDUAL CELLS OF THE RATS AND CATS WILL BE MEASURED AND COUNTED.

2415 CYTOLOGIC STUDIES IN DISEASES OF THE NERVOUS SYSTEM 2255-10, TERRY, ROBERT D., ALBERT EINSTEIN COLLEGE OF MEDICINE YESHIVA UNIVERSITY, N.Y., N.Y., 12/67-11/68, RENEWAL, \$59,174. NIND8

THIS RESEARCH WILL STUDY THE MORPHOLOGIC, METABOLIC AND CHEMICAL CHARACTERISTICS OF NEUROFIBRILLARY TANGLES INDUCED IN RABBITS. PLAQUE-LIKE LESIONS FOUND IN CHRONIC ANIMALS WILL ALSO BE STUDIED.

2420 EFFECT OF GROWTH ON BULK RNA AND A NEW RNA FRACTION, 6734-02, PENN, NATHAR W., RESIDENTIAL FOUNDATION FOR MENTAL HEALTH, INC., ALBANY, N.Y., 2/68-1/69, RENEWAL, \$11,180. NIND8

THIS RESEARCH CONCERNS THE STUDY OF THE PARTICIPATION OF DRNA IN THE INCORPORATION OF AMINO ACIDS INTO BRAIN PROTEIN.



- 2430 EFFECTS OF ACUTE BILIRUBIN INTOXICATION ON THE CNS, (1) 6899-0151, (2) 6899-02, SCHUTTA, HENRY S., PENNSYLVANIA HOSPITAL, PHILADELPHIA, PA., (1) 1/67-12/67, (2) 1/68-12/68, RENEWAL, (1) \$3,915, (2) \$23,933. NINDS

THIS RESEARCH PROPOSES TO DEFINE THE MORPHOLOGY OF LESIONS OCCURRING IN ACUTE BILIRUBIN INTOXICATION, SINCE IT APPEARS THAT THE ACUTE TYPE OF BILIRUBIN DAMAGE BEARS A CLOSE RELATIONSHIP TO THE EVENTS OCCURRING IN HUMAN BILIRUBIN INTOXICATION.

- 2440 ELECTROENCEPHALOGRAPHIC STUDIES IN NEWBORN AND YOUNG INFANTS, 3166-08, ENGEL, RUDOLF C.H., UNIVERSITY OF OREGON MEDICAL SCHOOL, PORTLAND, ORE. 1/68-12/68, RENEWAL, \$32,100. NINDS

THIS RESEARCH IS A CONTINUATION OF ELECTROENCEPHALOGRAPHIC OBSERVATIONS ON MATURATIONAL PATTERNS IN EEG INCLUDING RESPONSES TO PHOTIC AND ACOUSTIC STIMULATION IN PREMATURE AND FULL TERM INFANTS WITH NORMAL AND ABNORMAL NEUROLOGICAL FINDINGS. RACIAL AND SEXUAL DIFFERENCES ALSO ARE BEING EVALUATED.

- 2450 ELECTRON MICROSCOPY AND BIOCHEMISTRY OF LIPIDOSES, 2977-07, VOLK, BRUNO W., ISAAC ALBERT RESEARCH INSTITUTE OF THE JEWISH CHRONIC DISEASE HOSPITAL, BROOKLYN, NEW YORK, 8/67-12/68, RENEWAL, \$24,513. NINDS

THIS RESEARCH PROPOSES TO DETERMINE WHETHER A CELLULAR DEFICIENCY OF AN ACID HYDROLASE IS BASIC TO THE PATHOGENESIS OF SOME LIPIDOSES; TO INVESTIGATE THE DEVELOPMENT OF THESE LESIONS TO DETERMINE THEIR MORPHOGENESIS AND RELATIONSHIP TO OTHER CELLULAR ORGANELLES; AND TO EVALUATE THE STORAGE PROCESS IN SEVERAL STRAINS OF SERIALY SACRIFICED MICE WITH HEREDITARY STORAGE OR DEMYELINATING DISEASES.

- 2455 ELECTRON MICROSCOPY OF THE NERVOUS SYSTEM 7385-02, DEMPSEY, EDWARD W., COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS, N.Y., N.Y., 5/68-4/69, RENEWAL, \$47,215. NINDS

THIS RESEARCH IS CONCERNED WITH THE ULTRASTRUCTURE OF NERVOUS TISSUE ALTERED BY A VARIETY OF EXPERIMENTAL PROCEDURES. STUDY OF THE HUMAN BRAIN IN DISEASE IS ALSO UNDER WAY.

- 2460 ELECTRON MICROSCOPY OF NUTRITIONAL ENCEPHALOPATHY, 6918-02, YOUNG, PAUL A., ST. LOUIS UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS, MO., 2/68-1/68, RENEWAL, \$23,553. NINDS

THIS RESEARCH PROPOSES TO PRODUCE CEREBELLAR DEGENERATION IN NEWLY-HATCHED CHICKENS BY FEEDING THEM ON DIETS HIGH IN UNSATURATED FATS AND DEFICIENT IN VITAMIN E. CHICKENS FED ON NORMAL DIETS WITH ADEQUATE AMOUNTS OF VITAMIN E WILL BE USED AS CONTROLS. AT SELECTED TIMES EXPERIMENTAL AND CONTROL ANIMALS WILL BE KILLED AND THE CEREBELLAR TISSUE REMOVED AND PROCESSED FOR ELECTRON MICROSCOPIC STUDY.

- 2463 EMBRYOGENESIS OF THE ADRENERGIC NERVOUS SYSTEM 7255-02, MIRKIN, BERNARD L., UNIVERSITY OF MINNESOTA SCHOOL OF MEDICINE MINNEAPOLIS, MINN., 6/68-5/69, RENEWAL, \$22,190. NINDS

THIS RESEARCH PROPOSES TO ANALYZE THE FUNCTIONAL DIFFERENTIATION OF THE ADRENERGIC NERVOUS SYSTEM DURING INTRAUTERINE MATURATION TO DETERMINE ITS CONTRIBUTION TO MAINTENANCE OF FETUS HOMEOSTASIS IN PHYSIOLOGICAL AND DISEASE STATES.

- 2465 ENGAGE IN A PROGRAM FOR INVESTIGATIONS OF HISTOLOGICAL FACTORS RESPONSIBLE FOR NEURO AND SENSORY DISORDERS PH 43-68-1041, MYERS, RONALD, UNIVERSITY OF PUERTO RICO, SAN JUAN, PUERTO RICO, 7/68-6/69, RENEWAL, \$48,000. NINDS CONTRACT

NO ABSTRACT

- 2470 ETIOLOGY AND CONSEQUENCES OF PERINATAL BRAIN DAMAGE, 1620-09, COWEN, DAVID, COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK, N.Y., 4/67-3/69, RENEWAL, \$95,265. NINDS

THIS RESEARCH PROPOSES TO STUDY, IN RATS, THE POSSIBILITY OF OVERCOMING OR AMELIORATING THE RETARDING EFFECTS OF PRENATALLY-INDUCED BRAIN DAMAGE UPON LATER LEARNING AND MEMORY ABILITIES BY MEANS OF SPECIFIC DRUG TREATMENTS AND/OR SENSORY STIMULATION ADMINISTERED TO THE INJURED ANIMAL DURING ITS EARLY DEVELOPMENT.

- 2473 EXPERIMENTAL METABOLIC ENCEPHALOPATHIES 7336-02, FISHMAN, ROBERT A., UNIVERSITY OF CALIFORNIA MEDICAL CENTER, SAN FRANCISCO, CALIF., 6/68-5/69, RENEWAL, \$70,075. NINDS

THIS RESEARCH IS CONCERNED WITH BRAIN PERMEABILITY, MEMBRANE TRANSPORT AND METABOLISM AND IS DIRECTED TOWARD UNDERSTANDING THE PATHOPHYSIOLOGY OF THE COMPLEX NEUROLOGICAL MANIFESTATIONS CHARACTERIZING VARIOUS SYSTEMATIC DISORDERS.

- 2475 GANGLOSID INDUCTION DURING EMBRYONIC DEVELOPMENT 5104-04, DAIN, JOEL A.,

UNIVERSITY OF RHODE ISLAND, KINGSTON, R.I., 9/67-8/68, RENEWAL,  
\$15,151. NINDB

THIS RESEARCH IS CONCERNED WITH GLYCOLIPID SIALYLTRANSFERASE AND GLYCOLIPID GALACTOSYL TRANSFERASE INDUCTION AND THE GANGLIOSIDE LEVELS IN THE GERM LAYERS AT THE LATE GASTRULA IN THE FROG. IT WILL ATTEMPT TO CORRELATE THE INDUCTION OF SYNTHESIS OF 4 MAJOR GANGLIOSIDES WITH THE FORMATION OF NEUROLOGICAL STRUCTURE.

- 2480 HISTOPATHOLOGIC PATTERNS IN THE BRAIN OF THE PERINATAL PERIOD, 7388-02, TERPLAN, KORNEL L., RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK, ALBANY, NEW YORK, 5/68-4/69, RENEWAL, \$27,409. NINDB

THIS RESEARCH PROPOSES THE STUDY OF THE CENTRAL NERVOUS SYSTEM IN RELATION TO CONGENITAL HEART DISEASE WITH PARTICULAR ATTENTION TO THE FUNCTIONAL TYPES.

- 2485 INTEGRATIVE APPROACHES TO NEUROBIOLOGICAL PROBLEMS 6827-02, UNIVERSITY OF ROCHESTER, ROCHESTER, N.Y., 9/67-8/68, RENEWAL, \$102,117. NINDB

THIS RESEARCH CONCERNS 4 MAJOR PROJECTS. 1. STUDIES WITH NEURAL TRANSPLANTS IN SALAMANDERS. 2. ARTIFICIAL AUDITORY END ORGANS. 3. CEREBELLUM-ULTRASTRUCTURAL ACTIVITIES RELATED TO ELECTRICAL ACTIVITY. 4. INVESTIGATION OF THE BIOCHEMICAL BASIS OF AUDIOLOGICAL SEIZURES.

- 2490 LIPID COMPOSITIONS OF BRAIN IN PATHOLOGICAL STATES, 1847-10, RAUSER, GEORGE, CITY OF HOPE MEDICAL CENTER, DUARTE, CALIF., 10/67-9/68, RENEWAL, \$78,719. NINDR

THIS RESEARCH PROPOSES TO STUDY THE ROLES OF POLAR LIPIDS OF THE NERVOUS SYSTEM IN ANIMALS AND MAN AND TO CORRELATE FINDINGS WITH DATA ON ANATOMY, PHYSIOLOGY, ENZYMOLOGY AND PERMEABILITY; AND TO DEFINE ALTERATIONS IN LIPID COMPOSITION OF BRAIN AND SUBCELLULAR PARTICLES OF BRAIN IN SOME PATHOLOGICAL STATES IN MAN.

- 2493 METABOLISM AND FUNCTION OF COMPLEX LIPIDS 2946-09, KENNEDY, EUGENE P., HARVARD UNIVERSITY, BOSTON, MASS., 12/67-11/68, RENEWAL, \$51,881. NINDB

THIS RESEARCH IS CONCERNED WITH THE FUNCTION OF COMPLEX LIPIDS IN TERMS OF THE FUNDAMENTAL CHEMISTRY OF THESE MOLECULES AND THEIR METABOLISM.

- 2495 MICROCHEMICAL PATHOLOGY OF CEREBRAL CORTEX MATURATION 7563-01, BASS,

NORMAN H., UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE, CHARLOTTESVILLE, VA., 9/67-8/68, INITIAL, \$48,780. NINDB

THIS RESEARCH WILL SURVEY THE MICROCHEMICAL STRUCTURE OF DEVELOPING RAT AND HUMAN ISOCORTEX IN HEALTH AND DISEASE. METHODS OF QUANTITATIVE HISTOCHEMISTRY WILL BE EMPLOYED.

- 2500 MOLECULAR NEUROBIOLOGY-PROTEINS IN THE NERVOUS SYSTEM, 4270-06, SHOOTER, ERIC M., STANFORD UNIVERSITY, STANFORD, CALIF., 12/67-11/68, RENEWAL, \$90,822. NINDB

THIS RESEARCH PROPOSES TO EXTRACT AND FRACTIONATE BRAIN PROTEINS, AND TO CHARACTERIZE THEM WITH RESPECT TO AMINO ACID COMPOSITION, CELLULAR LOCALIZATION, FUNCTIONAL SIGNIFICANCE, DEVELOPMENTAL, GENETIC AND PATHOLOGICAL VARIATION. ISOLATED FRACTIONS WILL BE EXAMINED FOR RATE OF SYNTHESIS AND DEGRADATION OF THE POLYPEPTIDE CHAIN, AND FOR EXCHANGE OF EPISEQUENTIAL -- NH<sub>2</sub> AND NHR.

- 2510 MORPHOLOGY AND CYTOCHEMISTRY OF DEVELOPING SYNAPSES, 4179-06, MAYNARD, EDITH A., THE UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN, 9/67-4/69, RENEWAL, \$19,826. NINDB

THIS RESEARCH INVOLVES A FINE STRUCTURAL AND ELECTRON-MICROSCOPIC-CYTOCHEMICAL STUDY OF SYNAPSES IN THE LOBSTER'S STOMATOGASTRIC GANGLION; SUB-CELLULAR LOCALIZATION OF THE ELECTROPHORETICALLY SEPARABLE MULTIPLE MOLECULAR FORMS OF ACETYLCHOLINESTERASE FOUND IN SKELETAL MUSCLE AND BRAIN OF CHICKENS; AND LIGHT MICROSCOPE STUDIES OF DEGENERATION AND REGENERATION OF NEURONS IN THE CENTRAL NERVOUS SYSTEM OF SPINY LOBSTERS.

- 2520 NEURAL MECHANISMS OF LEARNING AND BEHAVIOR, 7458-02, LICKY, MARVIN E., UNIVERSITY OF OREGON, EUGENE, ORE., 3/68-2/69, RENEWAL, \$17,963. NINDB

THIS RESEARCH PROPOSES A COMBINED PROGRAM OF BEHAVIORAL AND NEUROPHYSIOLOGICAL EXPERIMENTS FOCUSED ON THE PROBLEM OF NEURAL MECHANISMS OF LEARNING. A COMPARATIVELY SIMPLE ORGANISM WHOSE NERVOUS SYSTEM PROVIDES FAVORABLE MATERIAL FOR A FINE GRAINED NEURO-PHYSIOLOGICAL ANALYSIS, THE MARINE GASTROPOD APLYSIA CALIFORNICA, IS THE ORGANISM OF CHOICE FOR THE STUDY.

- 2525 NEUROLOGICAL CLINICAL RESEARCH CENTER, 3359-07, MERRITT, H. HOUSTON, COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK, N.Y., 10/67-9/68, RENEWAL, \$182,751. NINDB

THIS RESEARCH IS A STUDY OF BRAIN AND MUSCLE DISEASE AT A CELLULAR

LEVEL USING CHEMICAL, ULTRASTRUCTURAL, HIGH IMPEDENCE, CYTOCHEMICAL AND EMBRYOLOGIC TECHNIQUES. STUDIES INCLUDE INTERMEDIARY METABOLISM AND EXPERIMENTAL ANIMAL PATHOLOGY.

- 2530 NEUROPATHOLOGY OF THE AGING MENTAL RETARDATE, 6882-03, SOLITARE, GILBERT B., YALE UNIVERSITY SCHOOL OF MEDICINE, NEW HAVEN, CONN., 8/68-7/69, RENEWAL, \$10,036. NINDB

THIS RESEARCH CONCERNS A DETAILED HISTOPATHOLOGICAL STUDY OF THE BRAINS OF MENTALLY-RETARDED INDIVIDUALS, INCLUDING HISTOCHEMICAL AND ELECTRON-MICROSCOPIC TECHNIQUES, WITH PARTICULAR EMPHASIS UPON THE ADULT POPULATION.

- 2535 NEUROSENSORY CENTER, 3354-07, VAN ALLEN, MAURICE W., UNIVERSITY OF IOWA, IOWA CITY, IOWA, 10/67-9/68, RENEWAL, \$170,178. NINDB

THIS PROJECT SUPPORTS INVESTIGATIONS, BOTH INDIVIDUAL AND COLLABORATIVE IN NEUROLOGY, OPHTHALMOLOGY AND PSYCHOLOGY.

- 2550 PATHOGENESIS OF INHERITED DEVELOPMENTAL BRAIN DISEASE, 3262-08, SIDMAN, RICHARD L., HARVARD MEDICAL SCHOOL, BOSTON, MASS., 6/68-5/69, RENEWAL, \$54,304. NINDB

THE RESEARCH INVOLVES THE STUDY OF MICE WITH INHERITED DISEASES OF THE BRAIN, PARTICULARLY DISEASES THAT AFFECT THE BRAIN WHILE IT IS FORMING. THE BEHAVIOR OF DEVELOPING BRAIN CELLS IS ANALYZED IN ORDER TO GIVE NEW IDEAS ON NORMAL BRAIN DEVELOPMENT AND TO SUGGEST MECHANISMS OF HUMAN DISEASES CAUSING MENTAL RETARDATION.

- 2570 QUANTITATIVE HISTOCHEMICAL STUDIES UPON CEREBRAL CORTEX, 361-15, POPE, ALFRED, MCLEAN HOSPITAL, BELMONT, MASS., 9/67-8/68, RENEWAL, \$19,016. NINDB

THIS RESEARCH CONCERNS EXPERIMENTS ON THE ARCHITECTONIC PROFILES OF SELECTED CHEMICAL STRUCTURAL COMPONENTS AND ENZYMES IN CORTEXES FROM PATIENTS WITH PRESENILE DEMENTIAS, INCLUDING CORRELATIONS OF BIOCHEMICAL DATA WITH HISTOPATHOLOGICAL FINDINGS. EXPERIMENTS WILL BE MADE ON RATS ON THE DISTRIBUTION PATTERNS WITHIN CORTICAL ARCHITECTONIC LAYERS, SUBJACENT WHITE MATTER, AND CAUDATE NUCLEUS OF SELECTED CHEMICAL STRUCTURAL COMPONENTS IN RELATION TO EXPERIMENTAL CYANIDE ENCEPHALOPHY.

- 2580 STORAGE DISEASE - INTRACELLULAR TRANSPORT AND DIGESTION, 6856-02,

GOLDFISCHER, SIDNEY L., ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY, BRONX, NEW YORK, 2/68-1/69, RENEWAL, \$34,505. NINDS

THIS RESEARCH PROPOSES TO INVESTIGATE INTRACELLULAR TRANSPORT, DIGESTION AND STORAGE, PARTICULARLY IN HEPATOCYTES, KUPFFER CELLS, NEURONS AND GLIA. COMBINED CYTOCHEMICAL ELECTRON MICROSCOPIC AND ELECTRON PROBE MICRO-ANALYTICAL TECHNIQUES WILL BE EMPLOYED TO STUDY THE INTRACELLULAR LOCALIZATION OF HYDROLASES AND THE UPTAKE AND STORAGE OF PROTEINS AND METALS.

- 2600 STUDIES OF TETRAPLOID DNA STATUS OF PURKINJE CELLS, 7100-02, LAPHAM, LOWELL W., UNIVERSITY OF ROCHESTER MEDICAL CENTER, ROCHESTER, NEW YORK, 2/68-1/69, RENEWAL, \$16,096. NINDS

THIS RESEARCH PROPOSES TO ACHIEVE AN UNDERSTANDING OF THE SIGNIFICANCE OF TETRAPLOIDY IN PURKINJE NEURONS IN TERMS OF ITS ROLE IN CELL METABOLISM. TIMED PREGNANT FEMALES WILL BE USED TO PROVIDE ANIMALS WHICH CAN BE STUDIED AT SUCCESSIVE INTERVALS THROUGHOUT THE PERIOD OF PRENATAL AND POSTNATAL MATURATION OF THE CEREBELLUM.

- 2610 STUDY OF BRAIN HISTOLOGY IN THE PERINATAL PERIOD, 3889-06, RIGGS, HELENA E., PHILADELPHIA GENERAL HOSPITAL, PHILADELPHIA, PA., 9/67-8/69, RENEWAL, \$6,002. NINDS

THIS RESEARCH PROPOSES AN INVESTIGATION OF THE ANATOMIC SUBSTRATA OF INFANTILE CEREBRAL PALSY AND MENTAL RETARDATION BY EVALUATING THE DEGREE OF MATURATION OF THE BRAIN IN THE PERINATAL INFANT, AND INVESTIGATION OF OCCULT LESIONS PREDISPOSING TO DEFECTIVE POSTNATAL BRAIN DEVELOPMENT.

- 2613 STUDY OF NERVOUS SYSTEM LIPIDS, 1006-14, NORTON, WILLIAM T., ALBERT EINSTEIN COLLEGE OF MEDICINE YESHIVA UNIVERSITY, NEW YORK, N.Y., 4/68-3/69, RENEWAL, \$47,537. NINDS

THIS RESEARCH IS CONCERNED WITH ISOLATING WHOLE NEUROGLIA AND NEURONAL PERIKARYA AND THE INITIATION OF LONG RANGE CHEMICAL AND BIOCHEMICAL STUDIES OF THESE CELLS. STRUCTURAL ANALYSIS OF INDIVIDUAL BRAIN GANGLIOSIDES WILL ALSO BE MADE.

- 2615 SURFACE AREA AND PATTERNS OF CORTICAL NEURONS, 3048-07, SCHADE, J.P., NETHERLANDS CENTRAL INSTITUTE FOR BRAIN RESEARCH AMSTERDAM, THE NETHERLANDS, 1/68-12/68, RENEWAL, \$8,000. NINDS

THIS RESEARCH IS CONCERNED WITH THE RELATIONSHIP BETWEEN SURFACE

AREA OF NEURONS AND THE DEVELOPMENT OF ELECTRICAL AND BIOCHEMICAL  
PARAMETERS IN CHICK AND RABBIT BRAINS.

- 2618 THE DEVELOPMENT OF NORMAL AND ABNORMAL MYELIN LIPIDS, 7537-02, CHASE, H.  
PETER, UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER, COLO.,  
9/68-8/69, RENEWAL, \$24,524. NINDB

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE EFFECTS OF MALNUTRITION  
AND DISTORTION OF AMINO ACID HOMEOSTASIS ON THE RATE OF DEPOSITION  
AND COMPOSITION OF MYCLIN CERBROSIDE.

- 2640 VITAMIN B6 AND CENTRAL NERVOUS SYSTEM FUNCTION, 5789-04, COURSIK,  
DAVID B., ST. JOSEPH HOSPITAL, LANCASTER, PA., 6/68-5/69, RENEWAL,  
\$36,382. NINDB

THIS RESEARCH PROPOSES TO CORRELATE BIOCHEMICAL FINDINGS IN  
EXPERIMENTAL VITAMIN B6 DEFICIENCY WITH THE BEHAVIOR OF THE  
ANIMAL IN TERMS OF ABILITY TO LEARN AND RETAIN MEMORY OF LEARNING.  
ELECTROENCEPHALOGRAPHIC TRACINGS WITH EVOKED RESPONSE TECHNIQUES  
WILL PROVIDE INFORMATION ON THE STATUS OF THIS NEURO-PHYSIOLOGICAL  
PARAMETER FOR CORRELATION WITH BIOCHEMICAL AND BEHAVIORAL DATA.

- 2650 CNS AND NUTRITIONAL INFLUENCES OF AMINO ACIDS IN PKU MR-07002-03,  
ALLEN, RICHARD J., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH., 12/1/65-  
11/30/69, RENEWAL, \$11,872. SRS

THIS RESEARCH FOCUSES UPON THE CENTRAL NERVOUS SYSTEM AND NU-  
TRITIONAL EFFECTS OF LOW PHENYLALANINE TREATMENT OR THE LACK  
OF IT ON THE VARIABLE MANIFESTATIONS OF PHENYLKETONURIA  
IN 54 PATIENTS. TWO GROUPS ARE BEING COMPARED: INFANTS UNDER  
TREATMENT FROM THE FIRST FEW WEEKS OF LIFE AND OLDER NORMAL CHIL-  
DREN AND ADULTS WITH UNTREATED PHENYLKETONURIA.

DIAGNOSIS AND/OR EVALUATION

- 2660 GALACTOSEMIA SCREENING OF NEWBORN IN THE COMMUNITY H-124; LONDON,  
MORRIS, NORTH SHORE HOSPITAL, MANHASSET, NEW YORK; 4/1/68-3/31/69  
RENEWAL, \$35,280. SRS

THIS RESEARCH IS PART OF A CONTINUED STUDY OF SCREENING THE NEW-  
BORN FOR GALACTOSEMIA AND GLUCOSE-6-PHOSPHATE DEHYDROGENASE DE-  
FICIENCIES. A MODEL SYSTEM FOR CHECKING THE NEWBORN IN THE  
COMMUNITY IS BEING DESIGNED AND ADVANCES IN SCREENING TECHNIQUES  
WILL BE ATTEMPTED.

- 2685 A COMPREHENSIVE EVALUATION OF HIGH-RISK PREGNANCIES (1) P01 03338-01,  
(2) P01 03338-01S1, HON, EDWARD HARRY, YALE UNIVERSITY, NEW HAVEN, CONN.,  
(1) 2/68-1/71, (2) 4/68-1/71, INITIAL, (1) \$193,093, (2) \$32,524. NICHD

THIS PROJECT WILL DETERMINE FACTORS WHICH CONTRIBUTE TO HIGH RISK PREGNANCY AND TAKE APPROPRIATE STEPS WHERE POSSIBLE TO CORRECT UNFAVORABLE FETAL ENVIRONMENT.

- 2690 ADAPTIVE BEHAVIOR AND EEG IN MENTAL RETARDS R01 01798-03, KUN, KAROLY J., WRENTHAM STATE SCHOOL, WRENTHAM, MASS., 7/67-6/68 RENEWAL, \$24,375. NICHD

THIS RESEARCH PROPOSES TO RELATE PARTICULAR EEG PHENOMENA THAT HAVE BEEN FOUND TO RELATE IMPORTANTLY TO MENTAL RETARDATION, TO THE ADAPTIVE BEHAVIOR OF RETARDS AS SHOWN BY RETARDS' PERFORMANCE IN THE AREAS OF PERSONAL SELF-CARE, SOCIAL BEHAVIOR, INTELLECTUAL FUNCTIONING, EDUCATIONAL ACHIEVEMENT, AND OCCUPATIONAL STATUS.

- 2695 A FORTY YEAR FOLLOW-UP OF MENTAL RETARDATES R01 02671-01A1, ROSS, ROBERT CALIF STATE DEPT OF MENTAL HYGIENE, SACRAMENTO, CALIF., 2/68-1/69, INITIAL, \$83,867. NICHD

THIS STUDY PROPOSES TO FOLLOW UP AND TEST 626 SUBJECTS, NOW IN THEIR FORTIES, WHO WERE INITIALLY TESTED IN SAN FRANCISCO "OPPORTUNITY ROOMS" AND FOUND TO HAVE HAD I.Q.'S OF 80 OR LESS. CONTROL GROUPS OF 100 SIBLINGS AND 100 CLASSMATES WILL BE STUDIED.

- 2710 CELLULAR ASPECTS OF HUMAN GENETICS AND IMMUNOLOGY R01 02552-02, HIRSCHHORN, KURT, MT. SINAI HOSPITAL, NEW YORK, N.Y., 9/67-8/71 RENEWAL \$159,792. NICHD

NO ABSTRACT SUPPLIED

- 2730 CHROMOSOME IDENTIFICATION IN CONGENITAL ANOMALIES R01 01979-03, LUZZATTI, LUIGI, STANFORD UNIVERSITY, STANFORD, CALIF., 2/68-1/69 RENEWAL, \$30,050. NICHD

THIS RESEARCH CONCERNS SCREENING PATIENTS WITH MULTIPLE CONGENITAL ANOMALIES FOR CHROMOSOME ABNORMALITIES. WORK IS IN PROCESS TO ESTABLISH OPTIMAL CONCENTRATION AND LENGTH OF EXPOSURE OF THYMIDINE TO PRODUCE MAXIMAL SYNCHRONIZATION OF DIVISION CYCLE IN LEUKOCYTE CULTURES.



- 2742 CNS PLASTICITY DURING CRITICAL PERIODS OF DEVELOPMENT P01-03113-01, BERMAN, A.J., JEWISH HOSPITAL OF BROOKLYN, NEW YORK, N.Y., 9/67-12/70, INITIAL, \$238,202. NICHD

THIS RESEARCH WILL STUDY THE PLASTICITY OF THE CNS AS A FUNCTION OF GESTATIONAL AGE TO DETERMINE CRITICAL DEVELOPMENTAL PERIODS AFFECTING BEHAVIORAL FUNCTIONING IN PRIMATES.

- 2745 COGNITION AND MOTIVATION IN RETARDED INDIVIDUALS P01 03008-01, ZIGLER, EDWARD F., YALE U., NEW HAVEN, CONN., 9/67-8/70, INITIAL, \$250,206. NICHD

THIS STUDY PROPOSES TO DELINEATE COGNITIVE FACTORS WHICH CHARACTERIZE RETARDED INTELLECTUAL FUNCTIONING FROM MOTIVATIONAL FACTORS WHICH INFLUENCE THE PERFORMANCE OF RETARDED PERSONS. INSTITUTIONALIZED AND NON-INSTITUTIONALIZED RETARDATEES WITH VARYING ETIOLOGIES AND M.A.'S AND C.A.'S WILL BE STUDIED.

- 2747 CONTINGENT CORTICAL D C CHANGES IN RETARDED CHILDREN R01 03488-01, STEINER, WILLIAM G., BRADLEY U., PEORIA, ILL., 9/67-12/68, INITIAL, \$23,063. NICHD

THIS RESEARCH PROPOSES TO OBTAIN CERTAIN NEUROPHYSIOLOGICAL MEASUREMENTS RELATING TO EXPERIMENTALLY INDUCED CHANGES IN THE ELECTRICAL NEGATIVITY OF THE STEADY (D.C.) POTENTIALS OF THE CORTEX IN A LARGE GROUP OF MENTALLY RETARDED AND NORMAL CHILDREN IN THE HOPE OF LEARNING THE NATURE OF THE PHYSIOLOGICAL DEFICIT, IF ANY, IN RETARDED CHILDREN WHO DO NOT SEEM TO BE SUFFERING FROM ANY KNOWN PATHOLOGICAL PROCESS OR BIOLOGICAL DEFECT.

- 2750 CYTOGENETIC STUDIES IN CONGENITAL DISEASES R01 00577-05S1, FINLEY, WAYNE HOUSE, UNIVERSITY OF ALABAMA, BIRMINGHAM, ALA., 10/67-3/68, RENEWAL, \$3,600. NICHD

THIS RESEARCH CONCERNS SELECTION OF PATIENTS WITH MULTIPLE MALFORMATIONS FOR CYTOGENETIC STUDIES SO THAT CORRELATION CAN BE MADE BETWEEN THE CYTOLOGICAL FINDINGS AND CLINICAL DATA. PATIENTS SELECTED ARE THOSE WITH UNCLASSIFIED MULTIPLE MALFORMATION SYNDROMES, THOSE WITH DOWN'S SYNDROME, AND THOSE LIKELY TO HAVE SEX CHROMOSOME ABERRATION SYNDROMES.

- 2770 CYTOLOGICAL AND BIOCHEMICAL STUDIES IN HUMAN GENETICS R01 00635-05, GERMAN, JAMES LAFAYETTE, III, CORNELL UNIVERSITY, NEW YORK, N.Y.;

9/67-8/68 RENEWAL, \$60,784. NICHD

THIS RESEARCH PROPOSES THE USE OF A COMBINED CYTOLOGICAL AND BIOCHEMICAL APPROACH TO THE STUDY OF GENETICAL DISORDERS AS WELL AS NORMAL VARIATION IN MAN. THIS WILL INCLUDE THE STUDY OF SPECIFIC DISEASES WITH A BIOCHEMICAL DEFECT AS WELL AS SEARCH FOR POLYMORPHIC SYSTEMS AND THE BIOLOGICAL SIGNIFICANCE AS SUCH.

- 2780 DERMATOGLYPHICS IN MENTAL RETARDATION, (1) R01 1507-03, (2) R01 1507-03S1, ALTER, MILTON, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN., (1) 7/67-6/68, (2) 7/67-6/68, RENEWAL, (1) \$15,037, (2) \$10,060. NICHD

THIS RESEARCH CONCERNS THE RELATIONSHIP OF DERMATOGLYPHIC PATTERNS AND CONDITIONS ASSOCIATED WITH EXTRA AUTOSOMAL CHROMOSOMES DISORDERS DUE TO EXTRA OR DEFICIENT SEX CHROMOSOMES, DISORDERS DUE TO CHROMOSOMAL DELETIONS AND MOSAIC STATES, CONDITIONS ATTRIBUTABLE TO A SINGLE ABNORMAL GENE, AND CONDITIONS WITHOUT A CLEAR GENETIC BASIS.

- 2790 DEVELOPMENT OF EEG AND BEHAVIORAL RESPONSES TO STIMULI R01 02296-03 BARNET, ANN B., CHILDREN'S HOSPITAL RESEARCH FOUNDATION, WASHINGTON, D.C., 11/67-10/70 RENEWAL, \$47,841. NICHD

THIS RESEARCH PROPOSES TO PROVIDE BASIC DATA ON THE MATURATION OF THE EEG AND SENSORY EVOKED POTENTIALS OF HUMAN INFANTS DURING THE COURSE OF DEVELOPMENT AND WILL ATTEMPT TO RELATE DATA OBTAINED FROM PSYCHOLOGICAL AND NEUROLOGICAL TESTING WITH THE NEUROPHYSIOLOGICAL DATA.

- 2800 ELECTRONIC EVALUATION OF FETAL ECG AND HEART RATE R01 01467-04, HON, EDWARD HARRY, YALE UNIVERSITY, NEW HAVEN, CONN., 9/67-8/69 RENEWAL \$67,797. NICHD

THIS RESEARCH PROPOSES TO DETERMINE IF SPECIFIC TYPES OF FETAL HEART RATE PATTERNS AND UNUSUAL FETAL ECG'S RECORDED DURING THE COURSE OF LABOR AND DELIVERY ARE RELATED TO ABNORMAL FETAL BIOCHEMICAL DETERMINATIONS.

- 2810 HUMAN CHROMOSOMAL ANEUPLOIDY R01 00588-06, MELLMAN, WILLIAM J., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA., 6/68-5/71 RENEWAL, \$50,610. NICHD

THIS RESEARCH CONCERNS FIBROBLAST CELLS DERIVED FROM THE SKIN OF PATIENTS WITH ANEUPLOIDY AND BIOCHEMICALLY DEFINED GENE

MUTATIONS ESTABLISHED IN LONG TERM CULTURE, THESE CELL CULTURES ARE BEING TESTED FOR THE PRESENCE OF BIOCHEMICAL DEFECTS.

- 2820 HUMAN NEONATAL EEG CORRELATES OF NEUROMORPHOLOGY R01 01814-06, BARTOSHUK, ALEXANDER K., BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND, 9/67-12/68 RENEWAL, \$14,205. NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE HOW THE NEONATAL EEG IS RELATED TO NEUROMORPHOLOGICAL DATA ON MATURATION.

- 2830 LAB INDICIES OF HUMAN FETOPLACENTAL FUNCTION R01 02042-03, CARRINGTON, ELSIE R., WOMAN'S MEDICAL COLLEGE OF PENNSYLVANIA, PHILADELPHIA, PA., 6/68-5/69 RENEWAL, \$20,815. NICHD

THIS RESEARCH PROPOSES TO REDUCE PERINATAL LOSSES AND TO PREVENT INTRAUTERINE DAMAGE PARTICULARLY NEUROLOGIC AND METABOLIC INCURRED BY THE FETUS IN HIGH RISK PREGNANCIES. THE PRODUCTION AND EXCRETION OF ESTRIOL WILL BE STUDIED IN NORMAL AND ABNORMAL PREGNANCIES.

- 2840 LONGITUDINAL AND RELATED PSYCHOHORMONAL STUDIES R01 00325-12, MONEY, JOHN, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD., 6/68-5/70 RENEWAL, \$35,209. NICHD

THIS RESEARCH CONCERNS HOMOSEXUALITY, PRECOCIOUS PUBERTY AND OTHER SYNDROMES; CHILDHOOD AND ADULT MATERNALISM IN ENDOCRINE AND CYTOGENETIC SYNDROMES; TOMBOYISHNESS AND ADRENOGENITAL SYNDROME; MALE HERMAPHRODITISM; SEX REASSIGNMENT REQUESTS IN HERMAPHRODITISM; TESTICULAR FEMINIZING SYNDROME; PERSONALITY IN THE XXY AND XO SYNDROMES; AND BODY IMAGE IN HOMOSEXUALITY AND TRANSSEXUALISM AND OTHER PARAPHILIAS.

- 2850 NEONATAL ASSESSMENTS AND FOLLOW-UP VALIDATIONS R01 02559-08, ROSENBLITH, JUDY F., BROWN UNIVERSITY, PROVIDENCE, R.I., 6/68-5/70 RENEWAL, \$22,216. NICHD

THIS RESEARCH PROPOSES TO DETERMINE WHETHER BEHAVIORAL ASSESSMENTS OF THE NEWBORN CAN SERVE A USEFUL FUNCTION IN THE EARLY DETECTION OF NEUROLOGICALLY IMPAIRED CHILDREN.

- 2860 NEONATAL CRY-SOUND ANALYSIS IN PEDIATRIC DIAGNOSIS R01 01985-02, TRURY, HENRY M., COMMUNICATION RESEARCH INSTITUTE, MIAMI, FLA., 1/68-8/68 RENEWAL \$32,525. NICHD

THIS RESEARCH CONCERNS THE DEMONSTRATION AND CORROBORATION OF A TECHNIQUE FOR PROVIDING CLINICAL DATA INDEPENDENTLY INDICATIVE OF THE GENERAL AND OFTEN SPECIFIC PHYSIOLOGICAL OR PATHOLOGICAL STATUS OF THE NEWBORN INFANT. VISUAL-ACOUSTIC RECORDS ARE USEFUL AS DIAGNOSTIC CRITERIA AND ARE AS INDIVIDUAL AS FINGERPRINTS OR FOOTPRINTS.

- 2870 QUANTITATIVE HUMAN CHROMOSOME STUDY AIDED BY COMPUTER RO1 02860-02, NEURATH, PETER W., NEW ENGLAND MEDICAL CENTER HOSPITALS, BOSTON, MASS., 6/68-5/70 RENEWAL, \$29,809. NICHD

THIS RESEARCH CONCERNS THE PERFORMANCE OF CHROMOSOME ANALYSES IN GREATER DEPTH AND ON A LARGER PERCENTAGE OF PATIENTS BY MAKING USE OF THE DEVELOPMENT OF A COMPUTER-AIDED SYSTEM OF CHROMOSOME ANALYSIS. CLINICIANS CAN BE INCLUDED AT THE EARLIEST POSSIBLE STAGE AND BECOME FAMILIAR WITH THE COMPUTER SYSTEM, WHILE ENGAGED IN CHROMOSOME RESEARCH.

- 2880 SLEEPING AND WAKING STATES IN PREMATURE INFANTS, (1) RO1 00351-06S1, (2) RO1 00351-06S2, PARMELEE, ARTHUR H., JR., UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., (1) 5/68-12/68, (2) 5/68-12/68, RENEWAL, (1) \$9,849, (2) \$304. NICHD

THIS RESEARCH PROPOSES TO DETERMINE DIAGNOSTIC CRITERIA FOR NORMAL AND ABNORMAL BRAIN FUNCTION IN NEWBORN INFANTS, BOTH PREMATURE AND FULL TERM, AND IN OLDER INFANTS BY MEANS OF ELECTROENCEPHALOGRAPHIC AND POLYGRAPHIC RECORDINGS AS WELL AS BEHAVIORAL OBSERVATIONS OF SLEEP AND AROUSAL.

- 2895 THE ATTENTIONAL RESPONSE OF THE INFANT TO DISCREPANCY RO1 03642-01, MC CALL, ROBERT B., UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, N.C., 6/68-5/72, INITIAL, \$26,277. NICHD

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE EFFECTS OF EXPERIENCE, AGE AND SEX ON THE ATTENTIONAL RESPONSE ON INFANTS TO DISCREPANCY IN VISUAL AND AUDITORY STIMULI.

- 2900 THE CYTOGENETICS OF EMBRYONIC MALDEVELOPMENT RO1 00549-07, MACINTYRE, M. NEIL, WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, 1/68-12/69 RENEWAL, \$44,847. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE BIOCHEMICAL ACTIVITY OF CERTAIN CHROMOSOMES BY IN VITRO BIOCHEMICAL STUDIES OF ABNORMAL HUMAN CELL LINES IN WHICH A SPECIFIC CHROMOSOMAL

ABERRATION EXISTS, AND PURSUE STUDIES OF THE CAUSES AND MEANS OF DETERMINING CHROMOSOMAL DAMAGE.

- 2910 A BEHAVIOR EVALUATION PROGRAM FOR RETARDED CHILDREN MH-14880-04, BARRETT, REATRICE H., WALTER E. FERNALD STATE SCHOOL, WAVERLY, MASS., 9/68 RENEWAL, \$57,654. NIMH

THIS RESEARCH SEEKS CONTINUING SUPPORT TO EXTEND THE APPLICABILITY OF CONTROLLED TECHNIQUES OF BEHAVIOR ANALYSIS TO THE MOST SEVERELY HANDICAPPED LEAST UNDERSTOOD CHILDREN WHO WILL SOON CONSTITUTE THE MAJORITY OF INSTITUTIONAL RESIDENTS AND TO EXPLORE THE USEFULNESS OF METHODS AND FINDINGS OF THIS RESEARCH GROUP IN TRAINING INSTITUTIONAL PERSONNEL AND IN DESIGNING MORE EFFICIENT, INDIVIDUALLY-TAILORED REMEDIAL PROCEDURES THAT WILL WORK FOR EACH CHILD.

- 2930 A DIAGNOSTIC EVALUATION BRIEF CARE PROGRAM MR 02066-04, WILDBERGER, WILLIAM C., WOODWARD STATE HOSPITAL-SCHOOL, WOODWARD, IOWA, 6/1/68-5/31/68, RENEWAL, \$88,504. SRS

THIS RESEARCH PROPOSES THE ESTABLISHMENT OF A MULTI-DISCIPLINARY TEAM IN A DIAGNOSTIC-EVALUATION SETTING; SHORT-TERM ADMISSION WOULD BE PROVIDED FOR APPLICANTS FOR CARE AND TREATMENT PLUS BRIEF ADMISSION TO THE SERVICE FOR PUPIL-PATIENTS ON "TRIAL VISIT" STATUS IN FOSTER HOMES OR VOCATIONAL PLACEMENTS.

- 2940 ANALYTIC STUDIES OF VISUAL PERCEPTION MH-8061-04, LEIBOWITZ, HERSHEL W., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA., 9/68 RENEWAL, \$24,099. NIMH

THIS RESEARCH AIMS TO INVESTIGATE VARIOUS ASPECTS OF PERCEPTUAL CONSTANCY WITH THE GOAL OF PROVIDING A QUANTITATIVE DATA BASE ON WHICH TO CONSTRUCT A THEORY OF THE MECHANISMS UNDERLYING THESE PHENOMENA, AND TO PROVIDE TECHNIQUES FOR EXTENDING CONSIDERATIONS OF CONSTANCY PHENOMENA WITHIN A MORE GENERAL CONTEXT.

- 2950 AN AUTOMATED PSYCHOLOGICAL TESTING BOOTH MH-14864-01, ELWOOD, DAVID L., BARTHOLOMEW COUNTY MENTAL HEALTH CLINIC, COLUMBUS, INDIANA, 1/68 RENEWAL, \$31,381. NIMH

THIS RESEARCH PROPOSES THE DEVELOPMENT OF A TECHNICIAN OPERATED AUTOMATED PSYCHOLOGICAL TESTING BOOTH (TB) CAPABLE OF PRESENTING TAPE RECORDED VERBAL STIMULI AND PERFORMANCE TEST MATERIAL (OBJECTS AND PICTURES) UPON REQUEST FROM THE SUBJECT (SUBJECT PRESSES A BUTTON) AND WOULD BE CAPABLE OF MAKING TAPE RECORDED RECORDS OF THE SUBJECT'S ANSWERS.

2960 BEHAVIORAL STUDY OF MENTALLY RETARDED CHILDREN MH-12711-01, CHESS, STELLA, NEW YORK UNIVERSITY MEDICAL CENTER, NEW YORK, N.Y., 10/68 RENEWAL, \$38,207. NIMH

THIS RESEARCH USES 50 MIDDLE-CLASS CHILDREN TO STUDY PERSONALITY AND BEHAVIORAL ORGANIZATION OF MENTALLY SUBNORMAL INDIVIDUALS. THIS GROUP, WHOSE I.Q. IS 50-75, M.A. 4-6, AND LIVING IN THEIR HOMES, MINIMIZES COMPLICATING FACTORS SUCH AS SOCIAL AND ECONOMIC IMPOVERISHMENT, INSTITUTIONAL EXCLUSION FROM THE COMMUNITY, AND PHYSICAL HANDICAPS.

2980 COMPREHENSIVE EVALUATION OF MENTALLY RETARDED MR-02025-04, RONDEAU, EDWARD A., PINELAND STATE TRAINING SCHOOL AND HOSPITAL, COLUMBIA, S.C., 3/68-2/69, RENEWAL, \$88,709. SRS

THIS RESEARCH PROPOSES TO IMPROVE CLASSIFICATION OF TRAINEES WITHIN DORMITORIES FOR MAXIMUM BENEFITS, EVALUATE THE ADMISSIONS WAITING LIST, INCREASE DISCHARGE RATE OF TRAINEES WHO ARE PREPARED TO RETURN TO COMMUNITY LIVING AND ENCOURAGE LOCAL COMMUNITY INTEREST CONCERNING MENTAL RETARDATION.

3000 INKBLOT PERCEPTION AND PERSONALITY MH-3223-08, HOLTZMAN, WAYNE, UNIVERSITY OF TEXAS, AUSTIN, TEXAS, 9/68 RENEWAL, \$46,461. NIMH

THIS RESEARCH PROPOSES, IN THE 5TH YEAR OF A 6-YEAR LONGITUDINAL STUDY, TO GIVE MAJOR EMPHASIS TO THE DEVELOPMENTAL ASPECTS OF PERCEPTION AND RELATED COGNITIVE FUNCTIONING IN CHILDREN. AN OVERLAPPING DESIGN HAS BEEN EMPLOYED TO STUDY A 12-YEAR DEVELOPMENTAL SPAN IN ONLY 6 CALENDAR YEARS. SUBJECTS CONSIST OF 338 NORMAL CHILDREN FROM 3 DIFFERENT GRADE LEVELS, 3 YEARS APART, STARTING WITH THE 4TH GRADE.

3010 LEARNING AND TRANSFER PROCESSES IN MENTAL DEFECTIVES MH-1099-12, ZEAMAN, DAVID, UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT, 9/68 RENEWAL, \$72,201. NIMH

THIS RESEARCH FOCUSES ON THE OPPOSING EFFECTS OF INTRADIMENSIONAL AND EXTRADIMENSIONAL SHIFTS IN THE ATTENTIONAL AND RETENTIONAL ASPECTS OF THE DISCRIMINATIVE LEARNING OF RETARDATEES.

3020 PERCEPTUAL FACTORS IN EMOTIONAL CONDITIONING MH-3916-08, GRINGS, WILLIAM W., UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIF.,

5/68 RENEWAL, \$26,821. NIMH

THIS RESEARCH FOCUSES ON THE EXPERIMENTAL MODIFICATION (CONDITIONING) OF RESPONSES CONTROLLED BY THE AUTONOMIC NERVOUS SYSTEM. THE RESPONSES OF PRINCIPAL INTEREST ARE THE ELECTRICAL CHANGES IN THE SKIN (GSR), THE RATE OF HEART BEAT, AND THE DISTRIBUTION OF PERIPHERAL BLOOD FLOW. THE GOAL OF THE RESEARCH IS TO IDENTIFY VARIABLES RELATED TO COGNITION AND PERCEPTION WHICH ARE IMPORTANT DETERMINERS OF THE PERFORMANCE IN CONDITIONING SITUATIONS.

- 3030 RETENTION IN AND RETRIEVAL FROM IMMEDIATE MEMORY MH-8556-04, BUSCHKE, HERMAN, STANFORD UNIVERSITY, STANFORD, CALIF., 4/68 RENEWAL, \$19,477. NIMH

THIS RESEARCH CONCERNS SHORT-TERM MEMORY (STM) WITH SPECIAL EMPHASIS ON INFORMATION STORED IN OR RETRIEVED FROM STM; STORAGE SYSTEMS USED IN STM; RETRIEVAL SYSTEMS USED IN STM; INPUT AND OUTPUT MEMORY; AUDITORY-VISUAL INTERACTION IN STM; ATTENTION, PERCEPTION, AND RELATIONS OF SIMULTANEOUS AND SERIAL PROCESSING; INTERACTION OF SHORT- AND LONG-TERM MEMORY; ERASURE, CUEING AND PARTITIONING IN STM.

- 3033 AUDIOLOGICAL STUDY BY EEG OF THE MENTAL RETARDED, 7480-02, SHIMIZU, HAROSHI, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD. 9/68-8/69, RENEWAL, \$2,454. NINDS

THIS RESEARCH IS CONCERNED WITH ANALYSIS OF EER TO ACOUSTIC STIMULI IN SEVERELY RETARDED SUBJECTS WITH CHRONIC BRAIN SYNDROMES IN COMPARISON WITH THOSE OBTAINED FROM NORMAL SUBJECTS WITH A PERIPHERAL HEARING IMPAIRMENT ALONE.

- 3035 CEREBRAL CORTICAL BIOPSIES, 5572-04, GONATAS, NICHOLAS K., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA., 9/67-8/68, RENEWAL, \$19,707. NINDS

THIS RESEARCH IS CONCERNED WITH ULTRASTRUCTURAL AND CYTOCHEMICAL STUDIES OF HUMAN CEREBRAL CORTICAL BIOPSIES.

- 3040 CEREBRAL IMPEDANCE AND HOMEOSTASIS, 7267-02, BIRZIS, LUCY, STANFORD UNIVERSITY, STANFORD CALIFORNIA, 9/67-8/68, RENEWAL, \$50,538. NINDS

THIS RESEARCH INVOLVES THE RECORDING OF LOCAL CEREBRAL IMPEDANCE CHANGES IN UNANESTHETIZED CATS WITH PERMANENTLY IMPLANTED BRAIN ELECTRODES. SLOW CHANGES IN MAGNITUDE OF IMPEDANCE AND PHASIC

CHANGES CORRELATED WITH THE CARDIAC PULSATIONS WILL BE ANALYZED UNDER VARIOUS PHYSIOLOGICAL CONDITIONS TO GAIN AN UNDERSTANDING OF THE SIGNIFICANCE OF BRAIN IMPEDANCE AND TO STUDY THE HEMODYNAMIC READJUSTMENTS OF LOCALIZED BRAIN AREAS WITH ACTIVITY.

- 3042 CLINICAL MEASUREMENT OF BRAIN RADIOISOTOPE UPTAKE, 4745-04A1, OLDENDORF, WILLIAM H., UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., 12/67-8/68, RENEWAL, \$7,999. NINDB

THE PURPOSE OF THIS RESEARCH IS TO DEVELOP A CLINICALLY USEFUL INDEX OF THE MEAN PERMEABILITY OF THE CAPILLARY BED OF THE ENTIRE BRAIN.

- 3044 COGNITIVE DEFICITS AND BRAIN DYSFUNCTION, 6192-02, DENNERLL, RAYMOND D., MICHIGAN EPILEPSY CENTER AND ASSOCIATION, DETROIT, MICH., 1/68-12/68, RENEWAL, \$44,235. NINDB

THIS RESEARCH INVESTIGATES THE RELATIONSHIPS OF SELECTED COGNITIVE PERCEPTUAL-MOTOR ABILITIES AND CEREBRAL DYSFUNCTION IN CHILDREN AND ADULTS WITH EPILEPSY. VARIABLES SUCH AS TYPE OF SEIZURE, LOCATION OF BRAIN DYSFUNCTION AND PERSONALITY FUNCTIONING WILL BE STUDIED.

- 3046 DEFICITS IN BRAIN DAMAGE, 5359-04, VEGA, ARTHUR, JR., OKLAHOMA MEDICAL RESEARCH FOUNDATION, OKLAHOMA CITY, OKLA., 9/67-8/68, RENEWAL, \$45,176. NINDB

THIS RESEARCH IS CONCERNED WITH FURTHER DEVELOPMENT AND CROSS-VALIDATION OF THE HOLSTEAD BATTERY OF TESTS FOR BRAIN DAMAGE. THE FLICKER PERIMETRY EXAMINATION WILL BE INTRODUCED INTO THIS BATTERY. THE BATTERY WILL BE EXTENDED DOWNWARD TO CHILDREN OF 5 YEARS OF AGE AND AN ABBREVIATED FORM WILL BE DEVELOPED.

- 3048 DIAGNOSTIC ASPECTS OF ELECTROENCEPHALIC AUDIOMETRY, 4799-058 SHEPHERD, DAVID C., JEWISH HOSPITAL OF ST. LOUIS, ST. LOUIS, MO., 4/68-3/69, RENEWAL, \$55,099. NINDB

THE PURPOSE OF THIS RESEARCH IS TO REFINE THE DIAGNOSTIC UTILITY OF THE AVERAGED ELECTROENCEPHALIC RESPONSE TO REPEATED AUDITORY STIMULI. DIAGNOSTIC INDICES BASED UPON ABNORMAL RELATION AMONG EARLY AND LATE COMPONENTS OF SIMULTANEOUS WAVE FORMS EVOKED FROM SUBJECTS WITH DIFFERING AUDITORY DISORDERS WILL BE DEVELOPED.

- 3060 AN EDUCATIONAL TEST OF THE LEARNING POTENTIAL HYPOTHESIS WITH ADOLESCENT MENTALLY RETARDED SPECIAL CLASS CHILDREN OEG-32-31-0000-6019, BUDOFF,



MILTON, CAMBRIDGE MENTAL HEALTH ASSOCIATION, CAMBRIDGE, MASS., 2/1/66-5/31/68 RENEWAL, \$6,005 OE

THIS RESEARCH PROPOSES TO TEST THE LEARNING POTENTIAL HYPOTHESIS WITH SPECIAL EXPERIMENTAL CURRICULUMS; TO STUDY PERSONALITY AND MOTIVATIONAL CORRELATES OF CURRICULUM RESPONSE AS A FUNCTION OF LEARNING POTENTIAL STATUS AND IN RELATION TO THE RESPONSE OF CHRONOLOGICAL-AGED UNDERACHIEVERS AND MENTAL-AGED CONTROL; AND TO STUDY THE EFFECTS OF CONTENT-ORIENTED CURRICULUMS ON STIMULATION OF PRODUCTIVE THINKING.

- 3070 RETARDATION IN INTELLECTUAL DEVELOPMENT OF LOWER-CLASS PUERTO RICAN CHILDREN IN NEW YORK CITY OEG 32-42-8145-5021, THOMAS, ALEXANDER, NEW YORK UNIVERSITY MEDICAL CENTER, NEW YORK, N.Y., 6/1/65-5/31/69 RENEWAL, \$21,855 OE

THIS RESEARCH FOCUSES UPON IDENTIFICATION OF DETRIMENTAL BEHAVIORAL AND INTELLECTUAL PATTERNS WHICH RETARD LEARNING IN A SAMPLE POPULATION OF 250 DISADVANTAGED PUERTO RICAN CHILDREN IN NEW YORK CITY. EFFORTS WILL ALSO BE MADE TO DETERMINE THOSE ENVIRONMENTAL FACTORS SURROUNDING THESE YOUTH WHICH CONTRIBUTE TO DETRIMENTAL GROWTH PATTERNS AND THOSE WHICH CAN BE USED ON THE OTHER HAND TO PROMOTE INTELLECTUAL FUNCTIONING.

- 3100 FACTORS CONTRIBUTING TO SUCCESSFUL COMMUNITY ADJUSTMENT OF DISCHARGED RETARDATES RD-1606-P, BOWMAN, PETER W., PINELAND HOSPITAL AND TRAINING CENTER, POONAL, MAINE, 7/1/66-6/30/68 RENEWAL, \$34,534. SRS

THIS RESEARCH AIMS TO PROVIDE A DETAILED DESCRIPTION OF THE PAST AND PRESENT LIVES OF SOME 575 MENTALLY RETARDED AND DEFICIENT PATIENTS DISCHARGED FROM PINELAND HOSPITAL AND TRAINING CENTER, AND TO DETERMINE WHAT PREDICTIVE ELEMENTS IN THE PAST LIFE TRAJECTORIES ARE MOST CLOSELY ASSOCIATED WITH POST-DISCHARGE SUCCESS AND NON-SUCCESS.

- 3110 REASONING, MORAL JUDGMENT, AND MORAL CONDUCT OF RETARDATES RD-2382-P, STEPHENS, WILL BETH, TEMPLE UNIVERSITY, PHILADELPHIA, PA., 2/1/67-1/31/69 RENEWAL, \$113,662. SRS

THIS RESEARCH PROPOSES TO TRACE THE DEVELOPMENT AND ASSESS THE RELATIONSHIP AMONG REASONING, MORAL JUDGMENT, AND MORAL CONDUCT OF YOUNG MALE RETARDATES. STRUCTURED SITUATIONS HAVE BEEN DEvised TO FURNISH OPPORTUNITY TO OBSERVE MORAL CONDUCT.

- 3120 TECHNIQUES FACILITATING DISCRIMINATION LEARNING RD-2286-P, WUNDERLICH,

RICHARD A., CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C., 7/1/66-6/30/68 RENEWAL, \$43,135. SRS

THIS RESEARCH PROPOSES TO INVESTIGATE SEVERAL TECHNIQUES WHICH ARE EXPECTED TO FACILITATE THE LEARNING OF CHILDREN UNDER ADVERSE CONDITIONS OF CONTIGUITY. BOTH NORMAL AND RETARDED CHILDREN WILL BE STUDIED. THE PROPOSED EXPERIMENTS HAVE THEORETICAL AND PRACTICAL SIGNIFICANCE TO HUMAN LEARNING.

#### PREVENTION

- 3140 DIAGNOSTIC-THERAPEUTIC STUDIES OF HIGH-RISK PREGNANCY H-192, GOLD, EDWIN M., NEW YORK MEDICAL COLLEGE, NEW YORK, N.Y., 7/1/68-6/30/69 RENEWAL, \$133,986. SRS

THIS RESEARCH PROPOSES TO APPLY CERTAIN BIOCHEMICAL AND ENDOCRINE PARAMETERS TO A PROGRAM FOR STUDY OF "HIGH-RISK" PREGNANT WOMEN RECEIVING TOTAL MATERNITY CARE AND TO STUDY THE ROLE OF THIAZIDES, USED PROPHYLACTICALLY, ON A SPECIFIC GROUP OF "HIGH-RISK" PREGNANT WOMEN (GRAVIDA 16 YEARS OF AGE OR YOUNGER).

- 3150 ASYMPTOMATIC BACTERIURIA IN PREGNANCY R01 02840-02, WHALLEY, PEGGY J., UNIVERSITY OF TEXAS, DALLAS, TEX., 6/68-5/71 RENEWAL, \$30,726. NICHD

THIS RESEARCH PROPOSES TO DETERMINE IF CLINICALLY APPARENT PYELONEPHRITIS CAN BE PREVENTED DURING PREGNANCY BY TREATING WOMEN WITH PERSISTENT BACTERIURIA WITH A FINITE COURSE OF ANTIMICROBIAL THERAPY RATHER THAN GIVE ANTIMICROBIALS CONTINUOUSLY THROUGHOUT GESTATION, AND TO EVALUATE THE IMMUNOLOGICAL RESPONSE TO DETERMINE IF THE RESPONSE CORRELATES WITH THE COURSE OF THE DISEASE.

- 3155 COMPARISON OF ISOTOPIC AND HEMAGGLUTINATION METHODS R01 03445-01, MASOUREDIS, SERAFEIM P., MILWAUKEE BLOOD CENTER INC., MILWAUKEE, WISC., 3/68-2/71, INITIAL, \$23,413. NICHD

THE PURPOSE OF THIS RESEARCH IS TO CORRELATE THE TECHNICON AUTOANALYZER QUANTITATIVE HEMAGGLUTINATION TECHNIQUE FOR MEASURING ANTIBODY CONCENTRATION WITH ISOTOPIC METHODS USING RADIOIODINE.

- 3160 PREVENTION OF HEMOLYTIC DISEASE OF THE NEWBORN R01 01955-03, GORMAN, JOHN G., COLUMBIA UNIVERSITY, NEW YORK, N.Y., 2/68-1/71 RENEWAL, \$13,803. NICHD

THIS RESEARCH INVOLVES THE RH IMMUNO-GLOBULIN IGG PREPARED FROM

HIGH TITERED ANTI-RH ANTIBODY CONTAINING PLASMA POOLS. INJECTED INTRAMUSCULARLY IT HAS PRODUCED PASSIVE TITER OF ARTIFICIALLY STIMULATED RH NEGATIVE VOLUNTEERS. ASSESSMENT OF THE EFFECTIVENESS OF RH IMMUNOGLOBULIN IN PREVENTING SENSITIZATION OF RH NEGATIVE MOTHERS AT RISK IS UNDERWAY.

- 3170 PREVENTION OF ISO-IMMUNIZATION WITH ANTI-RH SERUM R01 01504-04, JENNINGS, ELMER R., MEMORIAL HOSPITAL OF LONG BEACH, LONG BEACH, CALIF., 5/68-4/69 RENEWAL, \$27,066. NICHD

THIS RESEARCH CONCERNS HEMOLYTIC DISEASE OF THE NEWBORN CAUSED BY ANTIRODIES PRODUCED BY THE MOTHER, USUALLY IN RESPONSE TO STIMULATION BY FETAL ERYTHROCYTES. AN EFFORT TO PREVENT ISOIMMUNIZATION IS BEING MADE BY THE PROMPT DESTRUCTION OF THESE FETAL CELLS BY A POTENT ANTI-RH GAMMA GLOBULIN.

- 3180 COLLABORATIVE CROSS-CULTURAL CHILD REARING STUDY MH-9228-02, LOURIE, REGINAL S., CHILDREN'S HOSPITAL, WASHINGTON, D.C., 4/68 RENEWAL, \$38,677. NIMH

THIS RESEARCH IS A CROSS-CULTURAL STUDY OF CHILD REARING PATTERNS BETWEEN THE CHILDREN'S HOSPITAL OF THE DISTRICT OF COLUMBIA, AND THE QUEEN ANNA-MARIA INSTITUTE FOR CHILD HEALTH IN ATHENS, GREECE. CULTURAL AND ENVIRONMENTAL FACTORS WHICH PREDISPOSE TO DISTURBANCES OF HEALTHY EMOTIONAL, COGNITIVE, AND PHYSICAL DEVELOPMENT IN THE EARLIEST YEARS OF LIFE ARE THE FOCUS OF SPECIAL ATTENTION.

- 3200 PREVENTION OF CULTURALLY DETERMINED RETARDATION MH-10421-03, LOURIE, REGINALD S., CHILDREN'S HOSPITAL, WASHINGTON, D.C., 10/68 RENEWAL, \$72,000. NIMH

THIS RESEARCH PROPOSES TO ESTABLISH PROGRAMS FOR THE FIRST YEARS OF LIFE TO PREVENT CULTURALLY DETERMINED MENTAL RETARDATION. THE PROJECT INCLUDES DEVELOPMENT OF METHODOLOGIES FOR DOCUMENTATION OF INDIVIDUAL PROGRESS IN PHYSICAL, INTELLECTUAL AND EMOTIONAL DEVELOPMENT, AND METHODS OF CHILD-REARING FOR DAY-CARE AND FULL-TIME INSTITUTIONAL CARE OF CHILDREN FROM DEPRIVED BACKGROUNDS.

- 3220 A CLINICAL WORKSHOP IN MENTAL HEALTH AND PSYCHIATRIC NURSING FOR INSTRUCTORS IN SCHOOLS OF PRACTICAL NURSING BR-7-0544, LAMAR, C.F., UNIVERSITY OF KENTUCKY, LEXINGTON, KY., 6/25/67-7/31/67 INITIAL, \$14,218. OF

NO ABSTRACT SUPPLIED

- 3230 STUDIES OF HISTIDINEMIA AND OTHER METABOLIC DISORDERS MR-07003-02,

BALDRIDGE, ROBERT C., TEMPLE UNIVERSITY SCHOOL OF MEDICINE, PHILADELPHIA, PA., 10/1/65-8/30/68 RENEWAL, \$16,665. SRS

THIS RESEARCH PROPOSES TO TEST A MICROBIOLOGICAL AGAR-PLATE PROCEDURE SUITABLE FOR SCREENING THE BLOOD OF NEWBORN INFANTS FOR HISTIDINEMIA. ITS FEASIBILITY FOR USE IN A MASS SCREENING PROGRAM TO DETECT HISTIDINEMIA WILL BE DETERMINED. SIMILAR PROCEDURES ARE BEING DEvised TO DETECT TRYPTOPHANEMIA, TYROSINEMIA AND PHENYLALANINEMIA.

#### AMELIORATION

- 3240 A DEVELOPMENTAL PROGRAM FOR THE SEVERELY RETARDED MR-02031-05 & 05S1, THORNE, GARETH D., ARIZONA CHILDREN'S COLONY, COOLIDGE, ARIZONA, 2/68-1/69, RENEWAL, \$91,791. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A PROGRAM FOR THE SEVERELY OR PROFOUNDLY RETARDED TO TEACH THEM TO HELP THEMSELVES RATHER THAN GIVE THEM PREDOMINANTLY CUSTODIAL CARE.

- 3250 A PLAN TO REDUCE INSTITUTIONALIZATION OF THE MENTALLY RETARDED MR-02028-04, FINN, FRED F., SEASIDE REGIONAL CENTER, WATERFORD, CONNECTICUT, 1/67-8/68, RENEWAL, \$94,131. SRS

THIS RESEARCH INVOLVES A COMMUNITY-ORIENTED PROGRAM MOBILIZING COMMUNITY AGENCIES AND SERVICES IN BEHALF OF RETARDED PERSONS AND THEIR FAMILIES. THIS WILL BRING TO THE RETARDED A WIDE ARRAY OF SERVICES WHICH HAVE NOT BEEN USED IN THE PAST AND TO THE COMMUNITY A GREATER KNOWLEDGE OF THE NATURE AND NEEDS OF THE RETARDED.

- 3260 CHILD DEVELOPMENT AND TRAINING SERVICES MR-02031-05&05S1, KILLIAN, E.W., DENTON STATE SCHOOL, DENTON, TEXAS, 6/68-5/69, RENEWAL, \$100,000. SRS

THIS RESEARCH CONCERNS A MULTI-PHASE DEMONSTRATION PROJECT FOR 4 GROUPS OF MENTALLY RETARDED INSTITUTIONAL RESIDENTS: STUDENTS WHO GAINED AMBULATORY SKILLS PRIOR TO 6 YEARS OF AGE; SEVERELY AND PROFOUNDLY RETARDED WHO NEED AN EXPANSION PROGRAM; THE SENSORILY HANDICAPPED; AND THE SEMI-AMBULATORY.

- 3270 CONCENTRATED DORMITORY SERVICES MR-02062-03, PARNICKY, JOSEPH J., E.R. JOHNSTONE TRAINING AND RESEARCH CENTER, BORDENTOWN, N.J., 1/68-12/68 RENEWAL, \$84,509. SRS

THIS RESEARCH FOCUSES PRIMARILY UPON THE EDUCABLE YOUNG ADOL-

ESCENT ROY WITHIN A RESIDENTIAL REHABILITATION CENTER WHOSE EMOTIONAL AND BEHAVIORAL PATTERNS REQUIRE CONTINUOUS, INTENSIVE, SPECIALIZED HELP.

- 3280 DEVELOPMENTAL TRAINING FOR THE SEVERELY RETARDED MR-02099-02, FRAM, JOSEPH, YAKIMA VALLEY SCHOOL, SELAH, WASHINGTON, 1/68-5/69, RENEWAL, \$87,373. SRS

THIS RESEARCH PROPOSES THAT BEHAVIOR MODIFICATION AND PERCEPTUAL TRAINING PRODUCEDURFS BE APPLIED TO SEVERELY AND PROFOUNDLY NON-AMBULATORY RETARDATEES WITH EMPHASIS ON DEVELOPMENTAL TRAINING. SPECIFIC PROGRAMMED LEARNING MATERIALS ARE TO BE DEVELOPED FOR USE ON THE WARDS WITH THE ABOVE POPULATION.

- 3290 INTENSIVE SOCIALIZATION PROGRAM FOR MILDLY RETARDED MR-02069-04, ROOS, PHILIP, AUSTIN STATE SCHOOL, AUSTIN, TEXAS, 6/68-5/69, RENEWAL, \$100,000. SRS

THIS RESEARCH PLACES EMPHASIS ON DEVELOPMENT OF EFFECTIVE WORKING RELATIONSHIPS WITH FAMILIES AND COMMUNITY AGENCIES WITH PARTICULAR FOCUS ON ADMISSION, PRE-DISCHARGE AND POST-DISCHARGE CONTACTS. SPECIFIC TECHNIQUES OF BEHAVIOR MODIFICATION WILL BE SELECTED FROM CASEWORK, GROUP DYNAMICS, COUNSELING, OPERANT CONDITIONING AND SPECIAL EDUCATION.

- 3300 PROGRAM FOR THE AMBULATORY SEVERELY RETARDED MR-02104-02, HOSPITAL FOR THE MENTALLY RETARDED, GEORGETOWN, DELAWARE, 6/68-5/69, RENEWAL, \$60,180. SRS

NO ABSTRACT SUPPLIED

- 3310 PROGRAM IMPROVEMENT FOR INSTITUTIONALLY DEPRIVED MALES MR-02001-05, PORTER, ROBERT M., STATE HOME AND TRAINING SCHOOL, GRAND JUNCTION, COLORADO, 6/68-5/69, RENEWAL, \$79,700. SRS

THIS PROJECT PROPOSES TO BROADEN THE HIP TEAM'S ACTIVITIES BY PROVIDING A 20-RESIDENT PRE-PLACEMENT COTTAGE IMMEDIATELY AND TO PROVIDE A 107-RESIDENT FEMALE DORMITORY COMPARABLE TO THE MALE DORMITORY IN JUNE 1967. THE PROJECT STRIVES TO PROVIDE ENVIRONMENTAL ENRICHMENT DIRECTED TOWARD IMPROVEMENT IN ADAPTIVE ABILITY OF EACH RESIDENT.

- 3320 RESIDENTIAL UNIT CARE MR-02094-03, HENNE, FRANK R., NEWARK STATE

SCHOOL, NEWARK, N.Y., 6/68-5/69, RENEWAL, \$93,549. SRS

THIS RESEARCH AIMS TO PROVIDE INDIVIDUALIZED PERSONALIZED NURSING CARE FOR A WARD OF PRE-SCHOOL CHILDREN. THIS PLAN WILL SERVE TO DEVELOP A WHOLE NEW CONCEPT OF PATIENT CARE FOR THE RETARDED AND IT IS HOPED THAT THE DATA OBTAINED WILL ULTIMATELY RAISE THE STANDARDS OF CARE FOR ALL RETARDATE.

- 3340 THREE PROJECTS FOR HOSPITAL IMPROVEMENT MR-02008-04, ENGBERG, E.J., FARIBAULT STATE SCHOOL AND HOSPITAL, FARIBAULT, MINNESOTA, 9/67-8/68, RENEWAL, \$52,879. SRS

THIS RESEARCH INVOLVES 3 PROJECTS FOR HOSPITAL IMPROVEMENT: APPOINTMENT OF A COORDINATOR OF RESEARCH AND TRAINING; CONDUCTING A PATIENT CENSUS OF PHYSICAL, BEHAVIORAL, SOCIAL AND EMOTIONAL CHARACTERISTICS; AND CONDUCTING A BEHAVIORAL SURVEY TO GATHER INFORMATION FOR THE PATIENT CENSUS.

#### AMELIORATION - EDUCATION

- 3360 A GROUP DAY CARE PROGRAM FOR CULTURALLY DEPRIVED CHILDREN AND PARENTS R-185, CIsin, IRA H. GEORGE WASHINGTON UNIVERSITY, WASHINGTON, D.C. 8/1/68-7/31/69, RENEWAL, \$65,478. SRS

THE PURPOSE OF THIS PROJECT IS TO PROVIDE A MAXIMUM AMOUNT OF ENRICHED NURSERY SCHOOL EXPERIENCE FOR CHILDREN FROM LOW INCOME FAMILIES. TO COUNTERACT EARLY EFFECTS OF DEPRIVATION THREE YEAR OLD CHILDREN WERE ENROLLED.

- 3370 ADJUSTMENT AND ACHIEVEMENT IN A DESEGREGATED SCHOOL RO1 02863-02, GERALD, HAROLD B., UNIVERSITY OF CALIFORNIA, RIVERSIDE, CALIFORNIA, 6/68-5/72 RENEWAL, \$269,540. NICHD

THIS RESEARCH EXAMINES THE ANTECEDENTS, CONCOMITANTS, AND CONSEQUENCES OF SUCCESSFUL INTEGRATION OF NEGRO, MEXICAN-AMERICAN, AND WHITE CHILDREN IN THE ELEMENTARY GRADES OF THE PUBLIC SCHOOL SYSTEM. IT ASSESSES BOTH LONG TERM AND SHORT TERM EFFECTS OF DESEGREGATION. THE MAJOR INDICES OF SUCCESS ARE ACADEMIC ACHIEVEMENT AND EMOTIONAL ADJUSTMENT.

- 3380 EARLY INTELLECTIVE TRAINING AND SCHOOL PERFORMANCE, (1) RO1 02253-02s1, (2) RO1 02253-03, PALMER, FRANCIS H., CITY OF NEW YORK, N.Y., (1) 7/67-5/70, (2) 6/68-5/70, RENEWAL, (1) \$92,716, (2) \$112,161. NICHD

THIS RESEARCH PROPOSES TO DETERMINE THE EFFECTS OF TRAINING

CHILDREN AGED 2 AND 3 UPON SUBSEQUENT PERFORMANCE IN THE FIRST GRADE; TO INVESTIGATE THE MAIN AND INTERACTIVE EFFECTS OF TRAINING, AGE OF TRAINING, AND SOCIAL CLASS ON SUBSEQUENT CLASS-ROOM PERFORMANCE; AND TO DETERMINE THE RELATIONSHIP BETWEEN EDUCATION OF PARENTS, ORDINAL POSITION, SIZE OF FAMILY, AND OTHER BACKGROUND CHARACTERISTICS.

- 3390 MATERNAL CONTACT AND PREMATURE INFANT DEVELOPMENT R01 01418-04, SILBERSTEIN, RICHARD M., STATEN ISLAND MENTAL HEALTH SOCIETY, STATEN ISLAND, NEW YORK; 3/68-2/69 RENEWAL, \$113,694. NICHD

THIS RESEARCH PROPOSES TO EVALUATE A PROGRAM OF IN-HOSPITAL INVOLVEMENT OF MOTHERS IN THE CARE OF LOW BIRTHWEIGHT INFANTS; THE EFFECT OF THIS PROGRAM ON MATERNAL ATTITUDES AND BEHAVIOR IN CARING FOR THEIR INFANTS; THE EFFECTIVENESS OF INCREASED MATERNAL CARE AND STIMULATION ON LIMITING DISABILITY ASSOCIATED WITH PREMATURITY; AND PROVIDE COMPARATIVE DATA ON PREMATURES OF DIFFERING BIRTHWEIGHTS.

- 3395 THE DEVELOPMENT OF CULTURALLY DEPRIVED CHILDREN P01 03144-01, SCHIEFELBUSCH, R.L., UNIVERSITY OF KANSAS, LAWRENCE, KANS., 10/67-9/72, INITIAL, \$200,729. NICHD

THIS RESEARCH PROPOSES TO STUDY THE DEVELOPMENTAL FUNCTIONS OF CULTURALLY DEPRIVED CHILDREN. FIVE GENERAL AREAS OF STUDY ARE: 1. FACTORS OF EARLY DEVELOPMENT. 2. PRE-SCHOOL INTERVENTION. 3. ACHIEVEMENT MOTIVATION. 4. COMMUNITY PROBLEMS. 5. TRAINING ACTIVITIES.

- 3400 A CHILD EXPERIENCE ENRICHMENT PROJECT MR-02072-03, LEWIS, ANNE H., PAUL A. DEVER STATE SCHOOL, TAUNTON, MASS., 12/67-11/68, RENEWAL, \$92,801. SRS

THIS RESEARCH PROPOSES TO GIVE CHILDREN IN A STATE SCHOOL FOR THE MENTALLY RETARDED RICHER EXPERIENCES THAN PERSONNEL LIMITATIONS COULD OTHERWISE AFFORD. THE PROJECT PROVIDES 14 ACTIVITY THERAPISTS WHO PROVIDE WARMTH, PERSONAL FRIENDSHIP AND ENCOURAGEMENT TO GROWTH THROUGH STIMULATING ACTIVITIES AND EXPERIENCES.

- 3410 A PLAN TO AID DEVELOPMENT IN DEPENDENT CHILDREN MR-02087-03, FEINSTEIN, SAMUEL, WEST SENECA STATE SCHOOL, WEST SENECA, NEW YORK, 6/68-5/69, RENEWAL, \$64,413. SRS

THIS RESEARCH PROPOSES TO IMPROVE THE SOCIALIZATION AND HABIT TRAINING OF YOUNGSTERS BETWEEN THE AGES OF 5 AND 11 SO THAT SOME

MIGHT BE SERVICED IN FORMAL EDUCATION AND OTHERS BE ACCORDED THE INDIVIDUAL CARE AND DIGNITY DESERVED BY ALL.

- 3430 CLASSICAL CONDITIONING IN RETARDES AND NORMALS MH-10235-03, ROSS, LEONARD E., UNIVERSITY OF WISCONSIN, MADISON, WISC., 9/68 RENEWAL, \$16,740. NIMH

THIS RESEARCH USES CLASSICAL EYELID CONDITIONING TECHNIQUES TO INVESTIGATE BASIC LEARNING PROCESSES IN NORMAL AND RETARDED CHILDREN. PARAMETERS OF INTEREST INCLUDE CS-UCS INTERVALS, PARTIAL REINFORCEMENT EFFECTS, STIMULUS PARAMETERS AND INHIBITION PHENOMENA.

- 3440 DETERMINANTS OF LEARNING IN THE MENTALLY RETARDED MH-10724-03, ELLIS, NORMAN R., UNIVERSITY OF ALABAMA, UNIVERSITY, ALA., 9/68 RENEWAL, \$54,900. NIMH

THIS RESEARCH FOCUSES ON THE SHORT-TERM MEMORY PROCESSES AS A POSSIBLE MAJOR SOURCE OF DIFFERENCE BETWEEN NORMAL AND RETARDED SUBJECTS.

- 3450 DEVELOPMENT OF CHILD CARE SERVICES, MR-02038-04, BRECKENRIDGE, ROBERT, TRAVIS STATE SCHOOL, AUSTIN, TEXAS, 2/68-1/69, RENEWAL, \$77,660. SRS

THIS PROJECT PROVIDES TRAINING IN BASIC SELF-HELP SKILLS TO 120 SEVERELY AND PROFOUNDLY RETARDED STUDENTS THROUGH THE USE OF OPERANT CONDITIONING OR BEHAVIOR SHAPING TECHNIQUES.

- 3460 EDUCATION PROGRAM EXTENSION FOR MODERATELY RETARDED MR-02088-03, ETLING, GEORGE F., WASSAIC STATE SCHOOL, WASSAIC, NEW YORK, 1/68-12/68, RENEWAL, \$56,140. SRS

THIS RESEARCH PROPOSES TO FURTHER EXPAND AND DEVELOP THE EDUCATIONAL TRAINING PROGRAM FOR THOSE MODERATELY RETARDED WHO ARE 5 TO 21 YEARS OLD. THE PROGRAM IS BASED ON OCCUPATIONAL EDUCATION WITH PRACTICAL SUBJECT MATTER AND EXPERIENCES ON SEQUENTIAL LEVELS.

- 3470 ENRICHED ENVIRONMENT FOR YOUNG RETARDED PATIENTS MR-02023-04, WEIR, HOMER F., PLYMOUTH STATE HOME AND TRAINING SCHOOL, NORTHVILLE, MICHIGAN, 6/68-5/69, RENEWAL, \$49,471. SRS

THIS RESEARCH PROVIDES AN ENRICHED INSTITUTIONAL ENVIRONMENT FOR 200 SEVERELY TO MODERATELY RETARDED CHILDREN 4 TO 11 YEARS OLD, MANY OF WHOM WITH INTENSIVE PROGRAMMING WILL BE ELIGIBLE FOR



COMMUNITY LIFE AT LEAST ON A LIMITED BASIS.

- 3480 FUNCTIONAL TRAINING PROGRAM MR-02054-03, ACKERMAN, ORA R., FORT WAYNE STATE HOSPITAL AND TRAINING CENTER, FORT WAYNE, INDIANA, 9/67-8/68, RENEWAL, \$100,000. SRS

THIS RESEARCH PROVIDES FOR THE LOWER-FUNCTIONING, MORE DIFFUSELY HANDICAPPED CHILD, THE UP-GRADING SKILLS SUCH AS SELF-HELP, SOCIAL COMPETENCE, VOCATIONAL, AND VARIOUS ASPECTS OF READINESS SKILLS OF ECONOMIC IMPORTANCE. THIS WILL ENHANCE CHANCES OF SOME CHILDREN TO RETURN TO THE COMMUNITY, AND ENABLE OTHERS TO BECOME PRODUCTIVE MEMBERS WITHIN THE INSTITUTION.

- 3490 INTENSIVE TRAINING FOR SEVERELY RETARDED CHILDREN MR-02101-02, LAWLER, WILLIAM T., WARREN G. MURRAY CHILDREN'S CENTER, CENTRALIA, ILLINOIS, 1/68-12/68, RENEWAL, \$60,129. SRS

THIS RESEARCH AIMS TO OBTAIN FULLER RETURNS FROM SEVERAL PROMISING TRAINING PROCEDURES THROUGH THE INCREASE OF THE AIDE-CHILD RATIO TO AAMP STANDARDS. WITH ADDITIONAL AIDES THE CHILD WILL HAVE DIRECT SOCIAL INTERACTION WITH ADULT MODELS, A QUICKER MEETING OF SOME OF HIS NEEDS, AND A MORE SYSTEMATIC, FREQUENT AND PROMPT APPLICATION OF TRAINING PROCEDURES.

- 3500 LEARNING POTENTIAL AMONG THE EDUCABLE RETARDED MH-10588-03, BUDOFF, MILTON, CAMBRIDGE MENTAL HEALTH ASSOCIATION, CAMBRIDGE, MASS., 9/68 RENEWAL, \$48,820. NIMH

THIS RESEARCH PROPOSES TO CONTINUE TO STUDY AND MODIFY A LEARNING POTENTIAL APPROACH TO CLASSIFY LOW SCHOOL ACHIEVERS' ABILITY TO PROFIT FROM EXPERIENCE; RE-STANDARDIZE THE KOHS BLOCK DESIGN TEST ON NORMAL POPULATIONS; AND COMPARE THE EMR GROUPS TO SAMPLES OF LOW AND GRADE LEVEL ACHIEVERS OF DULL TO AVERAGE ABILITY OF SIMILAR CHRONOLOGICAL AND MENTAL AGES.

- 3530 PERSONALITY AND LEARNING IN RETARDED CHILDREN MH-12627-01, HAYWOOD, CARL H., GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENN., 9/68 INITIAL, \$28,863. NIMH

THIS RESEARCH SEEKS TO EXPLORE FURTHER THE MOTIVATION-HYGIENCE ORIENTATION WHICH HAS BEEN SHOWN TO INFLUENCE THE LEARNING PROCESS. THE OBJECTIVE IS TO ASSESS THE EXTENT TO WHICH A SELECTED PERSONALITY CHARACTERISTIC INTERACTS WITH INTELLIGENCE TO INFLUENCE THE EFFICIENCY OF LEARNING.

- 3540 PRE-PLACEMENT TRAINING PROGRAM MR-02029-05, GILIBERTY, FRANK R., SOUTH-

BURY TRAINING SCHOOL, SOUTH BURY, CONNECTICUT, 6/68-5/69, RENEWAL,  
\$99,984. SRS

THIS PROJECT DEALS WITH AN EXTENSION OF THE EXISTING PLACEMENT PROGRAM ORIENTED TOWARD THE RETURN OF INSTITUTION RESIDENTS TO THE COMMUNITY. THE NEED FOR THIS PROJECT WAS INDICATED BY AN ANALYSIS OF "PLACEMENT RETURNEES" OVER A 2-YEAR PERIOD.

- 3560 PROGRAMMED HABILITATION OF SEVERELY RETARDED CHILDREN MH-14914-02, BIRNBRAUER, JAY S., UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, NORTH CAROLINA, 9/68 RENEWAL, \$44,934. NIMH

THIS RESEARCH AIMS TO DEVELOP AN EFFECTIVE TOTAL HABILITATION PROGRAM FOR SEVERELY RETARDED CHILDREN, MADE UP OF EXPERIMENTALLY EXAMINED AND REPLICABLE PROCEDURES WHICH MAY BE APPLIED BY THOSE PERSONS WHO HAVE THE MOST CONTACT WITH THE CHILDREN, I.E., PARENTS, ATTENDANT PERSONNEL, AND TEACHERS.

- 3570 PROGRAMMING FOR THE HIGHER FUNCTIONING RETARDATE MR-02085-03, TOWERY, TWYMAN L., GREENE VALLEY HOSPITAL AND SCHOOL, GREENEVILLE, TENN., 2/68-1/69, RENEWAL, \$89,402. SRS

THIS RESEARCH PROPOSES TO EXPAND THE INSTITUTION'S PROGRAM FOR THE HIGHER FUNCTIONING RETARDATE TO DETERMINE AND DEMONSTRATE EFFECTIVE METHODS OF TRAINING WHICH WILL ENABLE THE HIGHER FUNCTIONING RESIDENT TO DEVELOP AND FUNCTION AS NEAR HIS OPTIMAL CAPACITY AS POSSIBLE.

- 3580 PROGRAMMING TO IMPROVE SOCIAL SKILLS OF RETARDATE MR-02064-04, POMEROY, JAMES M., FAIRVIEW HOSPITAL AND TRAINING CENTER, OREGON, 6/68-5/69, RENEWAL, \$98,023. SRS

NO ABSTRACT SUPPLIED

- 3600 PSYCHOLINGUISTIC METHODS FOR CLASSIFYING APHASIA MH-1876-10, WEPMAN, JOSEPH M., UNIVERSITY OF CHICAGO, CHICAGO, ILL., 11/68 RENEWAL, \$43,424. NIMH

THIS RESEARCH RELATES TO A PSYCHOLINGUISTIC ANALYSIS OF THE FREE SPEECH OF NORMAL CHILDREN. LINGUISTIC PARAMETERS CONSIDERED ARE: LEXICAL ANALYSIS BY RELATIVE FREQUENCY OF USE OF WORDS AND BY WORDS USED AS DIFFERENT PARTS OF SPEECH WORD-PARTS BY FREQUENCY OF OCCURRENCE OF DERIVATIONAL AFFIXES, OTHER BOUND MORPHEMES AND BY INFLECTIONS; SENTENCE UNITS BY CONSTITUENT AND TRANSFORMATIONAL ANALYSES; NOUN AND VERB PHRASE STRUCTURE; CLAUSE STRUCTURE; AND ERRORS IN

PUNCTUATION (GRAMMATICAL).

- 3620 REMEDIATION OF DISTURBED AND RETARDED CHILDREN MH-7346-03, QUAY, HERBERT C., UNIVERSITY OF ILLINOIS, URBANA, ILL., 9/68 RENEWAL, \$299,971. NIMH

THIS RESEARCH CONCERNS PRIMARILY PSYCHOEDUCATIONAL PROBLEMS IN THE REMEDIATION OF MENTALLY RETARDED AND EMOTIONALLY DISTURBED CHILDREN.

- 3630 THERAPY FOR RETARDATEES WITH COMMUNICATION DISORDERS MH-14877-04, SCHIEFELBUSCH, R.L., UNIVERSITY OF KANSAS, LAWRENCE, KANS., 9/68 RENEWAL, \$110,631. NIMH

THIS RESEARCH PROPOSES THE ORGANIZATION OF A SYSTEM OF TRAINING THROUGH DEMONSTRATION AND DISSEMINATION OF INFORMATION IN THIS CLINICAL SPECIALTY. PARTICIPANTS WILL BE SELECTED ON THE BASIS OF PREVIOUS PROFESSIONAL TRAINING AND EXPERIENCE AND ON CURRENT PROFESSIONAL ACTIVITIES. INTEGRAL TO THE PROJECT'S OPERATION WILL BE THE EVALUATION OF DEMONSTRATION ORGANIZATION AND TECHNIQUES.

- 3640 TODDLER TRAINING AND STIMULATION FOR MAXIMUM POTENTIAL, MR-02092-02, HAMMOND, JACK, WILLOWBROOK STATE SCHOOL, STATEN ISLAND, N.Y., 9/1/67-8/31/68, RENEWAL, \$99,655. SRS

NO ABSTRACT SUPPLIED

- 3650 TRAINING PROGRAM FOR RETARDED BLIND AND DEAF CHILDREN MR-02075-03, O'NEILL, JOSEPH E., SONOMA STATE HOSPITAL, ELDRIDGE, CALIFORNIA, 9/67-8/68, RENEWAL, \$91,977. SRS

THIS PROJECT AIMS TO PROVIDE A MILIEU IN WHICH BLIND AND DEAF RETARDED CHILDREN CAN BEST DEVELOP TO FULL POTENTIAL. BLIND AND DEAF CHILDREN ARE GROUPED TOGETHER ON A SINGLE, DIVIDED, INTENSIVELY STAFFED UNIT. TRAINING IS DONE IN A THERAPEUTIC MILIEU WITH COORDINATION OF NURSING STAFF, SCHOOL, PSYCHOLOGY, SOCIAL SERVICE, AND REHABILITATION SERVICES.

- 3660 TRAINING SEVERELY RETARDED ADULTS FROM THE BACK WARDS MR-02074-03, FARRELL, MALCOLM J., WALTER E. FERNALD STATE SCHOOL, WAVERLEY, MASS., 9/67-8/68, RENEWAL, \$76,176. SRS

THIS RESEARCH PROPOSES TO PROMOTE DEVELOPMENT OF SKILLS SUCH AS SELF-HELP, SELF-CARE, GROSS AND FINE MOTOR, SOCIAL AND RECEPTIVE, AND EXPRESSIVE LANGUAGE; AND TO PROMOTE WORK HABITS, RELAXATION

AND ENJOYMENT; AND TO DETERMINE THE EFFECTS OF INTEGRATION OF MALE AND FEMALE PATIENTS ON PERSONAL GROOMING AND SOCIAL BEHAVIOR.

- 3670 TRAINING THE UNTRAINABLES AT WRENTHAM STATE SCHOOL MR-02078-03, MESHORER, EDWARD, WRENTHAM STATE SCHOOL, WRENTHAM, MASS., 9/67-8/68, RENEWAL, \$100,000. SRS

THIS RESEARCH USES OPERANT CONDITIONING PROCEDURES WITH SEVERELY RETARDED MALE AND FEMALE PATIENTS; IT IS PLANNED THAT WITHIN A 10-YEAR PERIOD, APPROXIMATELY 250 TRAINEES WILL ACHIEVE A MASTERY OF THEIR SELF-HELP SKILLS.

- 3680 USE OF VOLUNTEERS AS TRAINERS OF RETARDED CHILDREN MH-14912-02, ROOS, PHILIP, AUSTIN STATE SCHOOL, AUSTIN, TEXAS, 1/68 RENEWAL, \$25,617. NIMH

THIS RESEARCH, THE VOLUNTEER PROJECT, PROPOSES TO EXTEND ITSELF TO THE SOCIAL SERVICE AND PSYCHOLOGY DEPARTMENTS, WHERE VOLUNTEERS WILL BE TRAINED IN ADMINISTERING SIMPLE PSYCHOLOGICAL TESTS AND THUS ATTEMPT TO ALLEVIATE THE SHORTAGE OF MANPOWER IN THIS AREA.

- 3690 A CURRICULUM CENTER IN SOCIAL LEARNING FOR SPECIAL CLASS PROGRAMS FOR THE EDUCABLE MENTALLY RETARDED OEG 32-42-1700-6018, GOLDSSTEIN, HERBERT, YESHIVA UNIVERSITY, NEW YORK, N.Y., 6/1/66-6/30/69 RENEWAL, \$199,470 OE

THIS RESEARCH CONCERNS A CENTER TO DEVELOP AND PROVIDE A COMPREHENSIVE PROGRAM IN SOCIAL LEARNING FOR SPECIAL TEACHERS OF THE EDUCABLE MENTALLY RETARDED.

- 3700 A DEMONSTRATION OF THE USE OF THE TEACHER INITIATED STEP-BY-STEP TEACHING SEQUENCE AS A MEANS OF IMPLEMENTATION OF CURRICULAR CONTENT IN CLASSROOMS FOR MILDLY (EDUCABLE) MENTALLY RETARDED OEG-3-6-061910-1599, THORSELL, MARGUERITE, KANSAS STATE DEPARTMENT OF PUBLIC INSTRUCTION, TOPEKA, KANSAS, 6/1/66-8/31/69 RENEWAL, \$50,018 OE

THIS RESEARCH PROPOSES TO DEVELOP THE STEP-BY-STEP TEACHING SEQUENCE AS A MEANS OF IMPLEMENTING CURRICULAR CONTENT, AND TO DEVELOP A PROGRAM OF REGIONAL DEMONSTRATION CLASSES TO BE USED FOR PRACTICE TEACHING AND AS VISITATION CENTERS FOR INSERVICE TRAINING PROGRAMS.

- 3710 A DEMONSTRATION-RESEARCH PROJECT IN CURRICULUM AND METHODS OF IN-

STRUCTION FOR ELEMENTARY LEVEL EDUCABLE MENTALLY RETARDED CHILDREN  
OEG 32-42-1700-1010, GOLDSSTEIN, HERBERT, YESHIVA UNIVERSITY, NEW  
YORK, N.Y., 6/1/64-8/31/67 RENEWAL, \$15,338. OE

THIS RESEARCH PROPOSES TO DEMONSTRATE AND EVALUATE THE EFFECTIVENESS OF AN EXPERIMENTALLY DEVELOPED CURRICULUM AND TEACHING METHOD FOR EDUCABLE RETARDED CHILDREN. TEACHERS IN EXISTING TYPICAL CLASSES WILL BE INSTRUCTED IN THE NATURE AND USE OF THE CURRICULUM AND TEACHING METHOD AND WILL ACTIVATE THESE IN THEIR CLASSES UNDER THE SUPERVISION OF PROJECT PERSONNEL.

- 3721 A LANGUAGE DEVELOPMENT PROGRAM FOR MENTALLY RETARDED CHILDREN BR 7-08151  
SMITH, JAMES O., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 9/1/67-8/31/69  
INITIAL, \$65,392. OE

THIS PROJECT WILL TEST AN INTENSIVE LANGUAGE DEVELOPMENT PROGRAM DESIGNED FOR SEVERELY, MODERATELY, AND MILDLY RETARDED INSTITUTIONALIZED CHILDREN. THE PROGRAM WILL ATTEMPT TO GIVE THE CHILDREN ENOUGH COMMON USAGE VOCABULARY THAT THEY CAN HANDLE A TRAINING PROGRAM.

- 3722 A SCHOOL PROGRAM FOR YOUNG MONGOLOID CHILDREN: A CURRICULUM DEVELOPMENT  
PROJECT BR 7-1025, CHALFANT, JAMES C., UNIVERSITY OF ILLINOIS, URBANA,  
ILLINOIS, 9/1/67-8/31/69, INITIAL, \$171,075. OE

THIS PROJECT WILL DEVELOP A TRAINING CURRICULUM FOR CHILDREN WITH DOWN'S SYNDROME, IN ITS SECOND PHASE THE CURRICULUM WILL BE TESTED WITH RETARDED CHILDREN. THE TRAINING WILL INCLUDE BEHAVIOR SHAPING RELATED TO SELF-HELP SKILLS, COGNITIVE TRAINING, AND LANGUAGE TRAINING.

- 3723 A SUMMER IN-SERVICE TRAINING PROJECT BR 8-8063, SCHMITT, ARMIN, SPECIAL  
CLASSES FOR HANDICAPPED INC., CASPER, WYOMING, 5/7/68-9/31/68, INITIAL,  
\$5,625. OE

THIS PROJECT IS DESIGNED TO GIVE HIGH SCHOOL AND COLLEGE STUDENTS AN EXPERIENCE IN THE MENTAL RETARDATION FIELD THROUGH SUMMER WORK AT A RECREATION AND TRAINING FACILITY.

- 3730 AN EXPERIMENTAL STUDY USING COMPRESSED SPEECH WITH EDUCATIONALLY RETARDED  
STUDENTS OEG-2-7-078195-4490, LEWIS, HARRY., UNIVERSITY OF COLORADO,  
BOULDER, COLORADO, 6/20/67-8/31/68, RENEWAL, \$8,336. OE

THIS RESEARCH WILL INVESTIGATE THE FEASIBILITY OF USING TAPED COMPRESSED SPEECH AS A MEDIUM OF COMMUNICATION FOR EDUCATIONALLY

RETARDED AND SLOW LEARNERS. IT IS HYPOTHESIZED THAT COMPRESSED SPEECH WILL REDUCE THE DISTRACTION CAUSED BY THE SLOWNESS OF NORMAL SPEECH, THUS HOLDING THE SUBJECTS ATTENTION.

- 3731 AN INVESTIGATION OF FACTORS INFLUENCING LEARNING IN THE MENTALLY RETARDED AND THEIR USE IN THE DESIGN OF INSTRUCTIONAL MATERIALS BR 7-0185, SEITZ, SUE, AUSTIN STATE SCHOOL, AUSTIN, TEXAS, 9/1/67-3/31/70, INITIAL \$35,459. OE

THIS RESEARCH WILL INVESTIGATE SOME OF THE VARIABLES AND LEARNING TASKS RELEVANT TO THE DESIGN OF INSTRUCTIONAL MATERIALS. THE EFFECTIVENESS OF PROMPTING VS CONFIRMATION, AS A TRAINING PROCEDURE WILL BE EXAMINED. THE PROJECT WILL DEVELOP VARIOUS INSTRUCTIONAL MATERIALS BASED ON THE RESEARCH RESULTS.

- 3740 AN INVESTIGATION OF SELECTED VARIABLES IN THE TEACHING OF SPECIFIED OBJECTIVES TO MENTALLY RETARDED STUDENTS OEG-4-7-062523-0403, FARGO, GEORGE A., UNIVERSITY OF HAWAII, HONOLULU, HAWAII, 11/2/66-9/25/67 INITIAL, \$50,090. OE

THIS RESEARCH PROPOSES TO STUDY THE TEACHER-STUDENT INTERACTION WITHIN THE TEACHING-LEARNING PROCESS WITH THE AID OF VIDEO TAPE RECORDERS. BY SYSTEMATICALLY CHANGING VARIOUS ELEMENTS AND COMBINATIONS OF ELEMENTS (TEACHERS, PUPILS, METHODS, AND MATERIALS) THE EXTENT TO WHICH EACH ELEMENT AND COMBINATION THEREOF CONTRIBUTE TO THE SUCCESS OR FAILURE OF THE STUDENT WILL BE DETERMINED.

- 3760 A PILOT PROJECT IN CURRICULUM DEVELOPMENT FOR WORK, EXPERIENCE AND OCCUPATIONS FOR EDUCABLE MENTALLY RETARDED CHILDREN BR-50163, GROELLE, MARVIN C., OAKLAND UNIFIED SCHOOL DISTRICT, OAKLAND, CALIFORNIA, 8/1/66-7/31/67 RENEWAL, \$4,651. OE

THIS RESEARCH AIMS TO DEVELOP CURRICULUM AND INSTRUCTIONAL MATERIALS FOR A "WORK EXPERIENCE AND OCCUPATIONS" COURSE FOR EDUCABLE MENTALLY RETARDED STUDENTS TO ASSIST THEM IN DEVELOPING VOCATIONAL SKILLS AND ATTITUDES NECESSARY TO OBTAIN AND RETAIN JOBS.

- 3770 A STUDY OF THE EFFECTS OF AN INTENSIVE TRAINING PROGRAM ON THE MOTOR SKILLS OF YOUNG EDUCABLE MENTALLY RETARDED CHILDREN OEG-4-7-070025-1944, ROSS, SHEILA, PALO ALTO MEDICAL RESEARCH, PALO ALTO, CALIFORNIA, 12/30/66-12/31/67 INITIAL, \$17,647. OE

THIS RESEARCH PROPOSES TO IMPROVE SOCIAL INTERACTION OF EDUCABLE MENTALLY RETARDED CHILDREN WITH THEIR PEERS BY MEANS OF AN INTENTIONAL TRAINING PROGRAM IN SOCIAL SKILLS SET IN A LOGICAL THINKING

FRAMEWORK.

- 3780 A STUDY OF THE EFFECTS OF THREE EXPERIMENTAL CURRICULUM UNITS ON THE SOCIAL PERCEPTION AND PRE-VOCATIONAL READINESS OF EDUCABLE MENTALLY RETARDED ADOLESCENTS OEG-2-7-068926-2370, CLARK, GARY M., GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENN., 11/4/66-9/18/67 INITIAL, \$5,445. OE

THIS RESEARCH CONCERNS THE APPLICATION OF VALIDITY CRITERIA TO AN EXPERIMENTAL UNIT OF PERCEPTUAL TRAINING FOR SOCIAL BEHAVIOR. APPROXIMATELY 45 EDUCABLE MENTALLY RETARDED YOUTHS IN SPECIAL EDUCATION CLASSES WILL BE SELECTED AND RANDOMLY ASSIGNED TO 1 OF 3 EXPERIMENTAL TREATMENTS.

- 3781 AUDITORY PERCEPTUAL ABILITY RELATED TO LANGUAGE ACQUISITION IN MENTALLY RETARDED CHILDREN BR 7-1242 GRAHAM, JAMES T., PURDUE UNIVERSITY, LAFAYETTE, INDIANA, 9/1/67-8/3/70, INITIAL, \$114,986. OE

THE OBJECTIVE OF THIS PROJECT IS THE DEVELOPMENT OF THE DATA, RELATED TO AUDITORY PERCEPTION AND LANGUAGE ACQUISITION IN THE MENTALLY RETARDED, THAT ARE REQUIRED FOR THE GENERATION OF MODELS OF LANGUAGE STIMULATION AND THERAPY PROGRAMS.

- 3782 BENNINGTON COUNTY DAY PROGRAM FOR PRE-SCHOOL MENTALLY RETARDED CHILDREN BR 8-0489, FORMAN, W. F., BENNINGTON COUNTY DAY SCHOOL, BENNINGTON, VERMONT, 3/1/68-2/8/69, INITIAL \$36,556. OE

THIS PROJECT IS AN EXPLORATORY EFFORT TO DEVELOP AND EVALUATE A DAY CARE PROGRAM FOR PRE-SCHOOL MENTALLY RETARDED CHILDREN. THE PROGRAM WILL CONCENTRATE ON SPEECH DEVELOPMENT, MOTOR SKILLS, AND SELF-HELP TRAINING IN A GENERAL PROGRAM OF SCHOOL READINESS TRAINING.

- 3790 CLASS SIZE AND TEACHER AIDES AS FACTORS IN THE ACHIEVEMENT OF THE EDUCABLE MENTALLY RETARDED OEG-3-6-062620-1879, BLESSING, KENNETH R., WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION, MADISON, WISC., 6/15/66-6/14/69 RENEWAL, \$53,952 OE

THIS RESEARCH PROPOSES TO RESOLVE, IN PART, THE MANPOWER PROBLEM IN SPECIAL EDUCATION WHILE MAINTAINING OR IMPROVING THE PROFESSIONAL POTENTIALITY OF PRESENTLY AVAILABLE SPECIAL TEACHING PERSONNEL. THREE VOLUNTEER TEACHERS OF EMR CLASSES IN THE MILWAUKEE SCHOOL SYSTEM WILL BE ASSIGNED ON A RANDOM BASIS TO EACH OF THE 8 CELLS OF A 2-CUBED COMPLETE FACTORIAL DESIGN.

- 3800 COGNITIVE TRAINING WITH RETARDED CHILDREN -III BR 6-2009 CORTER,

HAROLD M., NORTH CAROLINA STATE UNIVERSITY, RALEIGH, N.C., 6/1/67-6/30/69 INITIAL, \$133,136. OE

THIS RESEARCH PROPOSES TO DETERMINE THE EFFECTIVENESS OF FLEXIBILITY-RIGIDITY AND PRODUCTIVITY-RESPONSIVENESS TRAINING WITH RETARDED CHILDREN; TO DEVELOP THE PREVIOUSLY TESTED SIMILARITIES-DIFFERENCES CONCEPT FORMATION PROGRAM TO A FUNCTIONAL LEVEL; AND TO DEVELOP NEW PROGRAMS FOR TESTING AND COGNITIVE TRAINING IN AREAS OF JUDGMENT AND DISCRIMINATION, PERCEPTUAL TRAINING, DEUTERO LEARNING, AND CREATIVITY AND ORIGINALITY.

- 3810 COMPARISON OF SUCCESSIVE DISCRIMINATION REVERSAL PERFORMANCE ACROSS DIFFERENT LEVELS OF MENTAL RETARDATION OEG-1-7-068867-2209, GOSSETTE, ROBERT L., HOFSTRA UNIVERSITY, HEMPSTEAD, NEW YORK, 11/1/66-1/31/68 INITIAL, \$8,653. OE

THIS RESEARCH FOCUSES UPON A SYSTEMATIC EXAMINATION OF SUCCESSIVE DISCRIMINATION REVERSAL PERFORMANCE FOR SUBJECTS WITH VARYING LEVELS OF RETARDATION.

- 3820 CURIOSITY BEHAVIOR IN EDUCABLE MENTALLY RETARDED ADOLESCENTS: CHARACTERISTICS, MODIFIABILITY, AND CONSEQUENCES OF TRAINING OEG-1-6-061378-0584; MILLER, MARTIN B., YESHIVA UNIVERSITY, NEW YORK, N.Y., 3/1/67-9/30/68, RENEWAL, \$27,403. OE

THIS RESEARCH CONCERNS EXAMINATION FOR CHARACTERISTICS OF CURIOSITY MOTIVATION IN EDUCABLE MENTALLY RETARDED ADOLESCENTS, ESTABLISHMENT OF CORRELATES OF INDIVIDUAL DIFFERENCES IN CURIOSITY BEHAVIOR AMONG RETARDED LEARNERS, TRAINING FOR INCREASED ORIENTATION TOWARDS COMPLEX AND UNFAMILIAR STIMULUS QUALITIES AMONG NON-CURIOUS EDUCABLE MENTALLY RETARDED SUBJECTS, AND STUDY OF THE EFFECTS OF PERCEPTUAL CURIOSITY TRAINING.

- 3830 DEMONSTRATION OF DISSEMINATION PRACTICES ON SPECIAL CLASS INSTRUCTION FOR THE MENTALLY RETARDED: UTILIZING MASTER TEACHERS AS IN-SERVICE EDUCATORS OEG-3-7-062883-0499, CARR, DONALD AND MEYEN, EDWARD, UNIVERSITY OF IOWA, DES MOINES, IOWA, 11/1/66-10/31/69 INITIAL, \$94,531. OE

THIS RESEARCH PROPOSES TO DEMONSTRATE THAT A STATEWIDE COORDINATED INSERVICE EDUCATION PROGRAM USING MASTER TEACHERS CAN BE EFFECTIVE IN THE IMPROVEMENT OF PROGRAMS FOR EDUCABLE MENTALLY RETARDED CHILDREN; TO DISSEMINATE MATERIAL AND INFORMATION ON INSTRUCTIONAL METHODS TO SPECIAL CLASS TEACHERS; AND TO BRIDGE THE GAP BETWEEN RESEARCHER AND CLASSROOM TEACHER.

- 3832 DEVELOPMENT AND EVALUATION OF AUTOINSTRUCTIONAL PROGRAM IN ARITHMETIC



FOR THE EDUCABLE MENTALLY HANDICAPPED OEG-32-42-6165-5005, BOARD OF  
EDUCATION, ALBANY, N.Y., 2/1/67-8/31/67, RENEWAL, \$24,415. OE

THIS PROJECT PROPOSES TO DEVELOP AND EVALUATE A PROGRAM FOR TEACHING  
ARITHMETIC CONCEPTS TO EDUCABLE MENTALLY RETARDED CHILDREN.  
PROGRAMMED INSTRUCTIONAL TEACHING MATERIALS WILL BE DEVELOPED AND  
TESTED IN FIVE RANDOMLY SELECTED CLASSES.

- 3836 EFFECTS OF A STRUCTURED PROGRAM OF PERCEPTUAL-MOTOR TRAINING ON THE  
DEVELOPMENT AND SCHOOL ACHIEVEMENT OF EDUCABLE MENTALLY RETARDED CHILDREN  
BR 8-2104, FISHER, KIRK L., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY  
PARK, PA., 6/28/68-7/27/69, INITIAL \$10,000. OE

THIS RESEARCH WILL DEVELOP AND TEST UNDER CONTROLLED CONDITIONS AN  
INDIVIDUAL PERCEPTUAL-MOTOR ABILITIES TRAINING PROGRAM. STANDARD  
TESTS WILL BE USED IN THE SELECTION OF SUBJECTS AND THE EVALUATION  
OF THE SUBJECTS PROGRESS.

- 3840 EFFICACY OF SEVERAL APPROACHES FOR TEACHING READING TO THE EDUCABLE  
MENTALLY RETARDED OEG-32-52-0120-1022, WOODCOCK, RICHARD W., GEORGE  
PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENN., 6/1/64-11/31/67  
RENEWAL, \$18,163. OE

THIS RESEARCH CONCERNS THE READING INSTRUCTION PROGRAM FOR  
EDUCABLE MENTALLY RETARDED WHO WILL DEVELOP SKILL IN READING  
TO A POINT WHERE, AS AN ADULT, READING CAN BE USED FUNCTIONALLY  
AT HOME AND AT WORK.

- 3850 ESTABLISHMENT OF APPROPRIATE USE OF PRONOUNS AND PREPOSITIONS IN  
SCHIZOPHRENIC AND RETARDED CHILDREN OEG-4-6-061188-0614, LOVASS,  
O. IVAR, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF., 3/16/66-  
3/16/69 RENEWAL, \$33,218. OE

THIS RESEARCH PROPOSES TO INVESTIGATE THE CONDITIONS UNDER  
WHICH HANDICAPPED CHILDREN CAN LEARN THE CORRECT USE OF AND  
RESPONSE TO PREPOSITIONS AND PRONOUNS; EMPHASIS WILL BE ON  
SPEECH USEFUL IN THE CHILD'S DAY-TO-DAY FUNCTIONING.

- 3851 FACILITATION OF COGNITIVE DEVELOPMENT AMONG CHILDREN WITH LEARNING  
DEFICITS BR 8-0054, BULGARELLA, ROSARIA, MICHIGAN STATE UNIVERSITY, EAST  
LANSING, MICHIGAN, 2/1/68-1/31/69, INITIAL \$34,868. OE

THIS RESEARCH WILL DIAGNOSE SPECIFIC LEARNING DEFICITS, DESIGN  
MATERIALS AND PROCEDURES, AND TEST THESE MATERIALS AND PROCEDURES  
WITH CONTROLLED GROUPS OF MENTALLY RETARDED AND NORMAL CHILDREN TO

DETERMINE THEIR EFFECTIVENESS AS AIDS TO COGNITIVE DEVELOPMENT.

- 3870 FACTORS IN THE EFFECTIVENESS OF ARTICULATION THERAPY WITH EDUCABLE RETARDED CHILDREN OEG-1-7-070342-3544, MONTGOMERY COUNTY SUPERINTENDENT OF SCHOOLS, NORRISTOWN, PA., 4/1/67-5/31/69 INITIAL, \$31,485 OE

THIS RESEARCH WILL INVESTIGATE FACTORS IN THE EFFECTIVENESS OF USING COMPRESSED SPEECH THERAPY WITH THE MENTALLY RETARDED. PARTICULAR EMPHASIS WILL BE PLACED ON DETERMINING HOW MUCH THERAPY IS NEEDED TO MAKE NOTICEABLE IMPROVEMENT.

- 3871 FACTORS RELATED TO SPEECH HEARING BY MENTALLY RETARDED CHILDREN BR 8-0426 SIEGENTHALER, BRUCE M., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA., 6/24/68-12/23/69, INITIAL, \$74,421. OE

THIS RESEARCH WILL INVESTIGATE THE AUDITORY BEHAVIOR OF MENTALLY RETARDED CHILDREN TESTED ON THRESHOLD BY IDENTIFICATION OF PICTURES (TIP) AND DISCRIMINATION BY IDENTIFICATION OF PICTURES (DIP) TO ESTABLISH SPEECH LEARNING CHARACTERISTICS OF THE SUBJECTS.

- 3872 GOAL SETTING BEHAVIOR AS AN INDEPENDENT VARIABLE RELATED TO THE PERFORMANCE OF EDUCABLE MENTALLY RETARDED ADOLESCENTS ON TWO EDUCATIONAL TASKS BR 7-1-115, WARNER, DENNIS A., UNIVERSITY OF OREGON, EUGENE, OREGON, 4/1/68-3/3/69, INITIAL, \$10,000. OE

THIS RESEARCH HAS AS ITS PRIMARY OBJECTIVE AN ANALYSIS OF THE EFFECTS OF GOAL SETTING UPON THE PERFORMANCE OF INSTITUTIONALIZED AND NON-INSTITUTIONALIZED MENTALLY RETARDED ADOLESCENTS.

- 3880 INFLUENCES OF AN ADVANCE ORGANIZER ON THE VERBAL LEARNING AND RETENTION OF EDUCABLE MENTALLY RETARDATE OEG-1-6-062122-1570, NEISWORTH, JOHN, AND SMITH, ROBERT; UNIVERSITY OF DELAWARE, NEWARK, DEL., 6/1/66-8/31/68, RENEWAL, \$33,368. OE

THIS RESEARCH PROPOSES TO INVESTIGATE AND EVALUATE THE INFLUENCE OF AN "ADVANCE ORGANIZER" ON THE LEARNING AND RETENTION OF MEANINGFUL VERBAL MATERIAL BY EDUCABLE MENTAL RETARDATE. (AN ADVANCE ORGANIZER IS A BRIEF EXPOSITORY, INTRODUCTORY STATEMENT THAT PRECEDES A SUBSEQUENT DETAILED LEARNING PASSAGE).

- 3900 INTERVENTION IN THE COGNITIVE DEVELOPMENT OF THE CULTURALLY DEPRIVED

AND FUNCTIONALLY RETARDED NEGRO PRESCHOOL CHILD BR-5-0328, WEIKART, DAVID P., MICHIGAN STATE DEPARTMENT OF PUBLIC INSTRUCTION, LANSING, MICHIGAN, 7/1/66-6/30/67 RENEWAL, \$31,488. OE

THIS RESEARCH PROPOSES TO ASSESS A 2-YEAR COGNITIVELY-ORIENTED SCHOOL-AND HOME-BASED PRESCHOOL PROGRAM WITH RESPECT TO ITS EFFECTIVENESS IN DEVELOPMENT OF INTELLECTUAL QUALITIES OF CULTURALLY DEPRIVED, FUNCTIONALLY RETARDED NEGRO CHILDREN.

- 3901 LEARNING POTENTIAL AND EDUCABILITY AMONG THE EDUCABLY MENTALLY RETARDED BR 8-0506, BUDOFF, MILTON, CAMBRIDGE MENTAL ASSOCIATION, CAMBRIDGE, MASS. 6/17/68-6/16/70, INITIAL, \$312,187. OE

THIS RESEARCH WILL FOCUS ON DISCRIMINATING AMONG THE SUBGROUPS WITHIN THE NON-GAINER CATEGORY AND SEEK A CRITERIA BY WHICH TO IDENTIFY THESE CHILDREN WITHIN THE CONTEXT OF THE LEARNING POTENTIAL APPROACH. TWO HYPOTHESES WILL BE EXAMINED TO EXPLAIN THE UNRESPONSIVENESS OF NON-GAINERS.

- 3911 MATHEMATICS CURRICULUM INNOVATION AND EDUCATION FOR EDUCABLY MENTALLY RETARDED BR 8-0568, ARMSTRONG, JENNY, UNIVERSITY OF WISCONSIN, MADISON, WISCONSIN, 6/17/68-6/16/69, INITIAL, \$20,000. OE

THIS INVESTIGATION COMPARES THE RELATIVE EFFICACY OF FOUR DIFFERENT MATHEMATICS CURRICULUMS FOR EDUCABLE MENTALLY RETARDED PUPILS. REPETITION USED FOR REINFORCEMENT AND THE USE OF MANIPULATIVE AIDS MAKE UP THE CHIEF DIFFERENCES IN THE CURRICULUMS TO BE TESTED.

- 3912 PREDICTORS OF ACHIEVEMENT FOR EDUCABLE MENTALLY RETARDED CHILDREN BR 8-2082, BONFIELD, JOHN R., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA., 4/15/68-10/15/68, INITIAL, \$8,784. OE

THIS PROJECT WILL DESIGN AND EVALUATE A COMBINATION OF SUB TESTS FROM VARIOUS ABILITY TESTS TO DEVELOP A PREDICTOR OF ACHIEVEMENT FOR INSTITUTIONALIZED MENTALLY HANDICAPPED CHILDREN.

- 3913 PRE-PROFESSIONAL TRAINING IN MENTAL RETARDATION BR 8-0805, LOWN, IRVING, ARIZONA CHILDRENS COLONY, COOLIDGE, ARIZONA, 6/24/68-9/30/68, INITIAL, \$10,525. OE

THIS PROJECT IS DESIGNED TO GIVE HIGH SCHOOL AND COLLEGE STUDENTS AN EXPERIENCE IN THE MENTAL RETARDATION FIELD THROUGH SUMMER WORK AT A RECREATION AND TRAINING FACILITY.

- 3914 PROBLEM SOLVING IN THREE SENSE MODALITIES BY MENTALLY RETARDED CHILDREN

BR 7-8340, SMITH, JEROME, UNIVERSITY OF CONNECTICUT, STORRES, CONN.  
8/1/67-7/31/68, INITIAL, \$9,324. OE

THIS RESEARCH PROPOSES TO INVESTIGATE THE SIMILARITIES AND/OR  
DIFFERENCES IN THE RETARDED CHILD'S PROBLEM SOLVING BEHAVIOR WHEN  
HE USES AUDITORY, ACTIVE TOUCH, OR VISUAL SENSES.

- 3920 RELATIONSHIP BETWEEN THE TRAINING, EXPERIENCE AND SELECTED PERSONALITY  
CHARACTERISTICS OF TEACHERS AND THE PROGRESS OF TRAINABLE MENTALLY  
HANDICAPPED CHILDREN 5-1051, ENGLAND, JUNE, MICHIGAN STATE DEPARTMENT  
OF PUBLIC INSTRUCTION, LANSING, MICH., 7/1/66-12/31/68, RENEWAL,  
\$9,530. OE

THIS RESEARCH PROPOSES TO EXPLORE THE RELATIONSHIP BETWEEN THE  
PROFESSIONAL QUALIFICATIONS, EXPERIENCES, AND SELECTED PERSONALITY  
CHARACTERISTICS OF TEACHERS TO THE PROGRESS OF THE TRAINABLE  
MENTALLY HANDICAPPED CHILDREN. THE GROWTH OF APPROXIMATELY 600  
TRAINABLE MENTALLY HANDICAPPED CHILDREN IN ABOUT 60 CLASSROOMS  
WILL BE OBSERVED AND RECORDED OVER A 3-YEAR PERIOD.

- 3930 RESEARCH IN REMEDIAL GUIDANCE OF YOUNG RETARDED CHILDREN WITH BE-  
HAVIOR PROBLEMS WHICH INTERFERE WITH ACADEMIC LEARNING AND ADJUSTMENT.  
OEG-32-23-1020-6002, BIJOU, SIDNEY W., UNIVERSITY OF ILLINOIS,  
URBANA, ILL., 10/1/65-6/30/68 RENEWAL, \$59,497. OE

THIS RESEARCH AIMS TO ANALYZE THE IMPORTANCE OF SOCIAL CONSEQUENCES  
OF SEVERE PROBLEM BEHAVIORS IN A NURSERY SCHOOL SITUATION; TO  
REFINE THE TECHNIQUES FOR MODIFICATION OF SOCIALLY UNACCEPTABLE  
BEHAVIOR PROBLEMS; AND TO EVALUATE THE EFFECTS OF THE CHILD'S  
BEHAVIOR AT HOME AFTER THE PARENTS HAVE BEEN TRAINED BY THE  
TEACHERS IN HANDLING THE PROBLEM.

- 3940 SENSORY-PERCEPTUAL LANGUAGE TRAINING TO PREVENT SCHOOL LEARNING  
DISABILITIES IN CULTURALLY DEPRIVED PRESCHOOL CHILDREN OEG-32-52-  
7900-5025, MCCONNELL, FREEMAN, THE BILL WILKERSON HEARING AND SPEECH  
CENTER, NASHVILLE, TENN., 6/1/65-5/31/69 RENEWAL, \$65,582. OE

THIS RESEARCH FOCUSES UPON AN ORGANIZED, STRUCTURED, AND INTENSIVE  
PERCEPTUAL AND LANGUAGE STIMULATION PROGRAM FOR PRESCHOOL CHILDREN  
DIRECTED AT THE PREVENTION OF LEARNING PROBLEMS IN SCHOOL,  
THE FAILURE TO ACHIEVE, AND THE SUBSEQUENT SCHOOL DROPOUT.

- 3950 SPECIAL EDUCATION INSTRUCTIONAL MATERIALS CENTER OEG-32-14-1490-  
1033, MCINTYRE, ROBERT, UNIVERSITY OF SOUTHERN CALIFORNIA, LOS  
ANGELES, CALIF., 6/1/64-8/31/69 RENEWAL, \$190,763. OE

THIS RESEARCH CONCERNS THE DEVELOPMENT OF INSTRUCTIONAL MATERIALS AND METHODS RELATING SPECIFICALLY TO THE EDUCATION AND TRAINING OF THE MENTALLY-RETARDED INDIVIDUAL.

- 3951 SUMMER TRAINING WORK EXPERIENCE IN RECREATION BR 8-8066, CALL, CLIFTON, UTAH STATE TRAINING SCHOOL, AMERICAN FORK, UTAH, 6/14/68-10/13/68, INITIAL, \$9,291. OE

THIS PROJECT IS DESIGNED TO GIVE HIGH SCHOOL AND COLLEGE STUDENTS AN EXPERIENCE IN THE MENTAL RETARDATION FIELD THROUGH SUMMER WORK AT A RECREATION AND TRAINING FACILITY.

- 3952 STUDENT WORK EXPERIENCE AND TRAINING PROGRAM BR 8-8068, PRICE, WILLIAM, SOUTHERN ILLINOIS UNIVERSITY, 6/23/68-10/9/68, INITIAL, \$8,190. OE

THIS PROJECT IS DESIGNED TO GIVE HIGH SCHOOL AND COLLEGE STUDENTS AN EXPERIENCE IN THE MENTAL RETARDATION FIELD THROUGH SUMMER WORK AT A RECREATION AND TRAINING FACILITY.

- 3970 THE DEVELOPMENT OF A PHYSICAL EDUCATION PROGRAM FOR TRAINABLE MENTALLY RETARDED CHILDREN AND YOUNG ADULTS OEG-2-7-068564-0272, GROSS, LINDA, OPPORTUNITY CENTER SCHOOL AID FOR RETARDED CHILDREN ASSOCIATION, INC., BIRMINGHAM, ALABAMA, 9/13/66-8/31/67, INITIAL, \$6,856. OE

THIS RESEARCH PROPOSES TO PLAN A PROGRAM AND PROGRAM MATERIALS TO MEET SPECIFIC NEEDS FOR SOCIAL ADJUSTMENT AND MOTOR ABILITY DEVELOPMENT. MENTALLY RETARDED PERSONS (AGES 6-30) WILL PARTICIPATE; A DEVISED MOTOR ABILITY TEST WILL BE ADMINISTERED.

- 3980 THE DEVELOPMENT OF THE SOCIAL CONCEPT "GROUP" AMONG MENTALLY RETARDED CHILDREN OEG-4-7-078020-2091, TAYLOR, LLOYD, PHILLIPS UNIVERSITY, ENID, OKLAHOMA, 11/1/66-5/1/68 INITIAL, \$5,000. OE

THIS RESEARCH CONCERNS AN EXPLORATORY STUDY USING APPROXIMATELY 120 MENTALLY RETARDED AND NORMAL YOUTHS TO DETERMINE THEIR CONCEPT AND UNDERSTANDING OF GROUP ACTIVITY. THE ALL MALE SUBJECTS WILL BE DRAWN FROM FAMILY AND INSTITUTIONAL SETTINGS.

- 3990 THE EFFECT OF SPECIAL CLASS PLACEMENT ON THE SELF-CONCEPT OF ABILITY OF THE EDUCABLE MENTALLY RETARDED CHILD OEG-3-7-70052-3099, MICHIGAN STATE UNIVERSITY, EAST LANSING, MICH., 3/9/67-12/21/67

INITIAL, \$9,008. OE

THIS PROJECT WILL FOLLOW THE PROGRESS OF A MENTALLY RETARDED SAMPLE TO COLLECT DATA ON THE SOCIAL PSYCHOLOGICAL EFFECTS OF SPECIAL CLASS PLACEMENT OVER AN EXTENDED PERIOD OF TIME. IT WILL EXPLORE EXPLANATIONS OF THE INVESTIGATOR'S PREVIOUS FINDINGS IN THIS AREA AND SEEK FURTHER EXPLANATIONS.

- 4001 THE RELATIONSHIP AMONG VARIOUS DICHOTOMOUS DESCRIPTIVE PERSONALITY SCALES AND ACHIEVEMENT IN THE MENTALLY RETARDED BR 6-2685, RINGLEHEIM, DANIEL NEW YORK UNIVERSITY, NEW YORK, NEW YORK, 9/1/67-8/31/68, INITIAL, \$38,714. OE

THIS RESEARCH WILL EXAMINE THE RESPONSE CHARACTERISTICS OF RETARDED CHILDREN ON A BATTERY OF FIVE DICHOTOMOUS DESCRIPTIVE PERSONALITY SCALES, TO STUDY RELATIONSHIPS IN THE TEST RESULTS AND TO DEFINE PERSONALITY TRENDS IN THE CHILDREN.

- 4020 THE USE OF PROGRAMMED LANGUAGE TRAINING AS A MEANS FOR DIFFERENTIAL DIAGNOSIS AND EDUCATIONAL REMEDIATION AMONG SEVERELY RETARDED CHILDREN OFG-2-7-070218-1639, BRICKER, WILLIAM, GEORGE PEABODY COLLEGE FOR TEACHERS NASHVILLE, TENN., 1/2/67-8/31/69, RENEWAL, \$41,131. OE

THIS PROJECT WILL DEVELOP AND EVALUATE A LANGUAGE TRAINING PROGRAM FOR SEVERELY RETARDED CHILDREN. THE SUBJECTS WILL BE EXAMINED WITH RESPECT TO SENSORY IMPAIRMENT, SPECIFIC, AND GENERAL LEARNING DEFICITS, WITH ANALYSIS BASED ON THE FUNCTIONAL VARIABLES OF VERBAL BEHAVIOR ACQUISITION.

- 4040 TIME PERSPECTIVE CHANGE IN INSTITUTIONALIZED MENTAL RETARDATES UNDER CONDITIONS OF SOCIAL OR TOKEN REINFORCEMENT OEG-3-7-068918-1942, STATE HOSPITAL #2, DIVISION OF MENTAL DISEASE, ST. JOSEPH, MISSOURI, 1/1/67-9/30/67 INITIAL, \$7,640. OE

THIS PROJECT PROPOSES TO DEMONSTRATE THE EFFECTIVENESS OF SOCIAL OR TOKEN REINFORCEMENT ON BROADENING TIME PERSPECTIVE IN MENTAL RETARDATES AND DEMONSTRATE THE USE OF THESE REINFORCEMENTS IN FACILITATING ACQUISITION AND RETENTION OF LANGUAGE AND NUMBER CONCEPTS.

- 4041 TRAINING PROGRAM FOR HIGH SCHOOL AND COLLEGE STUDENTS IN THERAPEUTIC RECREATION AND CAMPING BR 8-8067, LEFEBURE, CLAUDETTE, CAMP AND CONFERENCE COMMITTEE, OAKLAND, NEW JERSEY, 6/25/68-9/10/68, INITIAL \$3,900. OE

THIS PROJECT IS DESIGNED TO GIVE HIGH SCHOOL AND COLLEGE STUDENTS AN EXPERIENCE IN THE MENTAL RETARDATION FIELD THROUGH SUMMER WORK AT A

RECREATION AND TRAINING FACILITY.

- 4050 TYPE OF SOLUTION IN THE PROBLEM SOLVING BEHAVIOR OF NORMAL AND MENTALLY-RETARDED CHILDREN 7-8030, DICKERSON, DONALD J., UNIVERSITY OF CONNECTICUT, STORRS, CONN., 11/1/67-10/31/68 INITIAL, \$6,950. OE

THIS RESEARCH FOCUSES ON STIMULUS FACTORS AFFECTING TYPE OF SOLUTION AND DEVELOPMENTAL TRENDS IN TYPE OF SOLUTION. THE EXPERIMENTAL DESIGN IS THAT OF 2-CHOICE, VISUAL COLLOR-FORM PATTERNS PRESENTED BY A MANUALLY OPERATED DISCRIMINATIVE-LEARNING APPARATUS.

- 4051 VERBAL OPERANT CONDITIONING OF YOUNG MONGOLOID CHILDREN BR 8/4038, MACCUBREY, SISTER MARY KATHERINE, SAINT ANN'S SCHOOL, ARLINGTON HEIGHTS, MASS., 6/14/68-9/13/68, INITIAL, \$4,500. OE

THIS PROJECT WILL TEST A PROGRAM OF INDIVIDUALIZED SPEECH TRAINING FOR PRE-SCHOOL MONGOLOID CHILDREN. THE INDIVIDUAL PROGRAM WILL BE DESIGNED IN RESPONSE TO INDIVIDUAL NEEDS OF THE SUBJECTS AND STRUCTURED TO PERMIT VERBAL CONDITIONING. A CONTROL GROUP WILL RECEIVE STANDARD GROUP INSTRUCTION.

AMELIORATION - VOCATIONAL REHABILITATION

- 4070 A HABILITATION PROGRAM FOR THE SEVERELY RETARDED MR-02043-04, BUGH, VERNON G., PACIFIC STATE HOSPITAL, POMONA, CALIF., 2/68-1/69, RENEWAL, \$73,562. SRS

THIS PROJECT ATTEMPTS TO DEVELOP AND REFINE TECHNIQUES THAT WILL HELP PROFOUNDLY RETARDED CHILDREN, RESIDING IN AN INSTITUTION, ACQUIRE MORE EFFECTIVE SKILLS OF DAILY LIVING. EXAMPLES OF THESE SKILLS ARE EATING, DRESSING, TOILET TRAINING, GROOMING AND SOCIALIZATION.

- 4080 AN IMPROVED PROGRAM FOR HABILITATION OF THE RETARDED MR-02077-02, BOWSER, LAWRENCE P., BELCHERTOWN STATE SCHOOL, BELCHERTOWN, MASS., 1/68-12/68, RENEWAL, \$92,801. SRS

THIS RESEARCH PROPOSES TO PROVIDE THE RETARDED INDIVIDUAL AN OPPORTUNITY TO EXPLORE, TO TEST HIMSELF, TO GROW AND BE A FULL PERSON BY MEANS OF A PROGRAM OF HABILITATION IN AREAS OF PHYSICAL EDUCATION, LANGUAGE, AND PHYSICAL THERAPY.

- 4085 ASSESSING OF WORK PERSONALITIES OF MENTALLY RETARDED ADULTS RD-2568-P,

LLOYD H. LOFQUIST, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.,  
7/1/67-6/30/68, INITIAL, \$41,417. SRS-ORDT

THIS RESEARCH IS CONCERNED WITH DEVELOPING RELIABLE MEASURES OF VOCATIONAL ABILITIES AND VOCATIONAL NEEDS WHICH CAN BE ADMINISTERED MEANINGFULLY TO RETARDED ADULTS. NORMATIVE DATA WILL BE OBTAINED WHICH WILL BE OF USE TO VOCATIONAL REHABILITATION COUNSELORS WORKING WITH THE RETARDED.

- 4090 AN INSTITUTION PROGRAM FOR THE DEFECTIVE DELINQUENT MH-14422-02,  
CALLIERATE, DOMINIC L., FAIRVIEW HOSPITAL AND TRAINING CENTER, SALEM,  
OREGON, 6/68 RENEWAL, \$11,037. NIMH

THIS RESEARCH CONCERNS THE DEVELOPMENT AND EVALUATION OF A PROGRAM FOR BEHAVIORAL MODIFICATION OF MENTALLY RETARDED DELINQUENT PATIENTS IN A RESIDENTIAL INSTITUTION FOR THE RETARDED. THE TREATMENT PROGRAM INCLUDED GROUP AND INDIVIDUAL COUNSELING, AN ORGANIZED PROGRAM OF INDIVIDUAL ALLOTMENT OF PRIVILEGES AND RESPONSIBILITIES, PSYCHODRAMA, VOCATIONAL INSTRUCTION, COUNSELING, WORK THERAPY AND COMMUNITY PLACEMENT FOLLOW-UP.

- 4100 COORDINATED PROGRAM OF DVR AND PUBLIC SCHOOLS FOR MENTALLY RETARDED  
RD-2068-D, SONGER, DAVID O., DEPARTMENT OF VOCATIONAL REHABILITATION,  
WASHINGTON, D.C., 11/1/66-10/31/68 RENEWAL, \$98,136. SRS

THIS RESEARCH PROPOSES TO ESTABLISH WITHIN EASTERN HIGH SCHOOL A SPECIAL COOPERATIVE REHABILITATION EFFORT DESIGNED TO PROVIDE A MORE CONCENTRATED SCHOOL PROGRAM WITH HOLDING POWER AND MORE ADEQUATE VOCATIONAL PREPARATION BY STUDENTS IN THE LOW-RANGE OF MENTAL ABILITY OR SUB-AVERAGE INTELLIGENCE FUNCTIONING WHO ARE PLACED IN THE LOWEST ACADEMIC TRACK.

- 4110 HABILITATION OF DISTURBED ADOLESCENT MALE RETARDATE MR-02076-03,  
SHELTON, JAMES T., PORTERVILLE STATE HOSPITAL, PORTERVILLE, CALIF.,  
6/68-5/69, RENEWAL, \$98,811. SRS

THIS RESEARCH FOCUSES UPON PROVISION OF AN INTENSIVE TREATMENT PROGRAM IN A STATE HOSPITAL FOR EMOTIONALLY DISTURBED ADOLESCENT MALE RETARDATE. A HIGHLY ORGANIZED CLOSED ENVIRONMENT IN WHICH AS MUCH BEHAVIOR AS POSSIBLE MAY BE PROGRAMMED TO YIELD IMMEDIATE CONSEQUENCES FOR THE PATIENT WILL BE CREATED.

- 4140 HIP: PRE-VOCATIONAL TRAINING MR-02050-04804S1, NAGLER, BENEDICT,  
LYNCHBURG TRAINING SCHOOL AND HOSPITAL, LYNCHBURG, VIRGINIA, 2/68-1/69,  
RENEWAL, \$35,176. SRS



THIS RESEARCH PROPOSES TO EXPAND AND IMPROVE PRE-VOCATIONAL TRAINING PROGRAMS FOR MENTALLY RETARDED ADOLESCENTS IN AN INSTITUTIONAL SETTING. EMPHASIS IS PLACED ON ALLOWING EACH INDIVIDUAL TRAINEE TO PROGRESS AT HIS OWN RATE IN ANY NUMBER OF TRAINING AREAS.

- 4150 HIP: RECREATIONAL DEPARTMENT MR-02049-04, NAGLER, BENEDICT, LYNCHBURG TRAINING SCHOOL AND HOSPITAL, LYNCHBURG, VIRGINIA, 2/68-1/69, RENEWAL, \$42,789. SRS

THIS RESEARCH PROPOSES TO COORDINATE ALL THE RECREATIONAL ACTIVITIES AT THE HOSPITAL, STRENGTHEN THE REMOTIVATION PROGRAM, AND ADD ADDITIONAL NIGHT AND WEEKEND ACTIVITIES.

- 4160 HOME LIVING TRAINING PROGRAM GOAL, HABILITATION MR-02044-03, MARKS, JOHN R., IDAHO STATE SCHOOL AND HOSPITAL, NAMPA, IDAHO, 2/68-1/69, RENEWAL, \$55,881. SRS

THIS RESEARCH PROPOSES TO DETERMINE THE MOST EFFICIENT METHOD OF PLACING MENTALLY RETARDED INDIVIDUALS IN A COMMUNITY, PRIMARILY IN A VOCATIONAL SETTING. ROLES OF PROFESSIONAL DISCIPLINES AND RESOURCES REQUIRED AT THE COMMUNITY LEVEL FOR PLACEMENT SUCCESS WILL ALSO BE DETERMINED.

- 4180 IMPROVEMENTS IN INDEPENDENT LIVING MR-02007-04, HENDERSON, C.M., OWATONNA STATE SCHOOL, OWATONNA, MINNESOTA, 2/68-1/69, RENEWAL, \$62,803. SRS

THIS RESEARCH PROPOSES TO EXPAND SPECIAL LIVING FACILITIES WITHIN AN INSTITUTION FOR EDUCABLE RETARDED CHILDREN IN AN ATTEMPT TO CREATE A LIVING SITUATION THAT MORE CLOSELY APPROXIMATES THAT WHICH A STUDENT MIGHT EXPECT TO ENCOUNTER UPON LEAVING THE INSTITUTION.

- 4190 INTENSIVE HABILITATION AND MOTIVATION PROGRAM MR-02063-03, BONAFEDE, VINCENT I., CRAIG COLONY SCHOOL AND HOSPITAL, SONYEA, NEW YORK, 6/68-5/69, RENEWAL, \$99,950. SRS

THIS RESEARCH PROPOSES AN INTENSIVE, DEVELOPMENTAL PLAN TO REALIZE THE FULL POTENTIALS OF 40 MENTALLY RETARDED EPILEPTIC BOYS AND GIRLS, AGES 5 T/ 10 YEARS, WITH I.Q.'S RANGING FROM 0.28 TO 0.42. THE PLAN IS TO GIVE EACH CHILD THE LOVING CARE AND UPBRINGING OF AS NEAR NORMAL HOME LIFE THAT IS POSSIBLE IN AN INSTITUTIONAL ENVIRONMENT.

- 4210 INTENSIVE HABIT TRAINING OF SEVERELY RETARDED ADULTS MR-02095-03, PETERSON, HAROLD W., BRAINERD STATE SCHOOL AND HOSPITAL, BRAINERD, MINN., 6/68-5/69, RENEWAL, \$99,761. SRS
- THIS RESEARCH INVOLVES THE ROTATION OF INSTITUTIONALIZED SEVERELY AND PROFOUNDLY RETARDED AMBULATORY ADULTS THROUGH AN INTENSIVE HABIT TRAINING SESSION WHICH WILL USE THE TECHNIQUES OF LEARNING AND OPERANT CONDITIONING TO MODIFY BEHAVIOR AND IMPROVE SELF-CARE SKILLS; 36 RESIDENTS WILL BE UNDER TRAINING AT A TIME.
- 4220 INTENSIVE PROGRAM FOR COMMUNITY PLACEMENT MR-02052-04, IZUTSU, SATORU, WAIMANO TRAINING SCHOOL AND HOSPITAL, PEARL CITY, HAWAII, 5/68-4/69, RENEWAL, \$47,282. SRS
- THIS PROJECT IS A PROGRAM OF INTENSIVE PREPARATION FOR COMMUNITY PLACEMENT FOR 41 MENTALLY RETARDED MALE RESIDENTS.
- 4230 PHYSICAL HABILITATION FOR THE SEVERELY RETARDED MR-02102-02, ROSEN, DAVID, WOODBRIDGE STATE SCHOOL, WOODBRIDGE, NEW JERSEY, 1/68-12/68, RENEWAL, \$55,060. SRS
- THIS RESEARCH PROPOSES TO SHOW THAT IT IS POSSIBLE TO REDUCE OR ELIMINATE SIMULTANEOUSLY THOSE FACTORS WHICH LIMIT THE POTENTIAL DEVELOPMENT OF MANY PHYSICALLY HANDICAPPED, SEVERELY RETARDED RESIDENTS. THIS WILL BE ACHIEVED THROUGH THERAPY PROVIDED BY A PSYCHIATRIST, PHYSICAL THERAPIST, OCCUPATIONAL THERAPIST AND PHYSICAL THERAPY AIDES.
- 4250 PRE-VOCATIONAL EXPLORATION IN COMMUNITY LIVING MR-02081-03, MACULANS, EDGAR M., HENRYTON STATE HOSPITAL, HENRYTON, MARYLAND, 6/68-5/69, RENEWAL, \$97,958. SRS
- THIS RESEARCH PROPOSES TO WORK WITH 48 OF 400 RESIDENTS TO DEMONSTRATE THE INCREASED EFFECTIVENESS OF SKILL AND HABIT DEVELOPMENTS THROUGH CONCENTRATED TRAINING.
- 4260 PROMOTING COMMUNITY LIVING WITH RECREATION ACTIVITIES MR-02080-02, GREENBERG, CHARLES, ROME STATE SCHOOL, ROME, NEW YORK, 9/67-8/68, RENEWAL, \$63,360. SRS
- THIS RESEARCH PROPOSES TO PROMOTE THE ADJUSTMENT OF THE MENTALLY RETARDED PATIENT IN THE COMMUNITY BY FOSTERING THE DEVELOPMENT OF

A VARIETY OF SKILLS RELATED TO CONSTRUCTIVE USE OF LEISURE TIME.

- 4280 SELF-CARE DEVELOPMENT AND VOCATIONAL HABILITATION MR-02096-02, MURRAY, WILLIAM E., NEW CASTLE STATE HOSPITAL, NEW CASTLE, INDIANA, 9/67-8/68, RENEWAL, \$98,265. SRS

THIS RESEARCH PRESENTS, FOR PATIENTS WITH NEUROLOGICAL DISORDERS WITH AND WITHOUT MENTAL RETARDATION, A PLAN INCLUDING A SEQUENCE IN TIME THE PATIENTS ARE EXPECTED TO MEET COMMUNITY STANDARDS IN APPEARANCE, PRODUCTIVITY, USE OF EARNINGs, COMMUNICATION SKILLS, SOCIAL BEHAVIOR AND SELF-RELIANCE.

- 4290 TERMINAL EMPLOMENT IN A RESIDENTIAL SHELTERED WORKSHOP MR-02105-02&02S1, MULCAHY, RAYMOND M., BRANDON TRAINING SCHOOL, BRANDON, VERMONT, 6/68-5/69 RENEWAL, \$11,534. SRS

THIS PROJECT PROPOSES TO OPERATE ON A SUBCONTRACT BASIS, A WORKSHOP, IN WHICH SELECTED JOBS WILL BE OBTAINED FROM VARIOUS INDUSTRIES. THE WORKSHOP WILL ACCOMMODATE APPROXIMATELY 50 SEVERELY RETARDED MALE AND FEMALE ADULTS WHO WILL BE PAID ACCORDING TO INDIVIDUAL PRODUCTIVITY. THERE WILL BE COMPLIANCE TO ALL FEDERAL AND STATE SAFETY AND HEALTH STANDARDS.

- 4300 THE REHABILITATION OF DELINQUENT RETARDATEs MR-02083-03, ELLIOTT, JAMES F., MURDOCH CENTER, BUTNER, NORTH CAROLINA, 2/68-1/69, RENEWAL, \$53,049. SRS

THIS RESEARCH INVOLVES AN EXPERIMENTAL, RESIDENTIAL PROGRAM FOR 20 MILDLY RETARDED DELINQUENT ADOLESCENTS. A STANDARDIZED PROGRAM HAS BEEN DEVELOPED FOR TEACHING PRACTICAL SKILLS ESSENTIAL FOR COMMUNITY READJUSTMENT.

- 4310 TRAINING NON-PROFESSIONAL COMMUNITY PROJECT LEADERS MH-14821-04, MADORE, C. ELIZABETH, DONA ANA MENTAL HEALTH SERVICES, LAS CRUCES, NEW MEXICO, 10/68 RENEWAL, \$97,324. NIMH

THIS RESEARCH PROPOSES TO EXPLORE THE EFFECTIVENESS OF A SPECIAL METHOD OF SELECTING, ASSIGNING, TRAINING AND GIVING CONSULTATION TO NON-PROFESSIONAL MENTAL HEALTH WORKERS AS THEY AND THE COMMUNITY DEVELOP SPECIFIC MENTAL HEALTH SERVICES.

- 4320 AN AREA-WIDE EDUCATIONAL VOCATIONAL PREPARATION AND PLACEMENT PROGRAM FOR HIGH SCHOOL EDUCABLE MENTALLY RETARDED STUDENTS OF MUSKEGON COUNTY,

MICHIGAN: A TOTAL COMMUNITY APPROACH OEG-32-32-0000-5019, ADAIR  
NORMAND, MUSKEGON AREA INTERMEDIATE SCHOOL DISTRICT, MUSKEGON, MICH.,  
9/1/66-8/31/69 RENEWAL, \$47,530. OE

THIS RESEARCH PROPOSES TO DEVELOP A 4-YEAR PROGRAM FOR 250 STUDENTS  
WITH EMPHASIS ON SOCIAL ADJUSTMENT AND WILL CONSIST OF LIFE-ORIENTED  
ACADEMIC PREPARATION, JOB-ORIENTED PERSONAL AND WORK SKILLS EDUCA-  
TION, JOB EVALUATION, COUNSELING WITH PUPILS AND PARENTS, ON-THE-  
JOB TRAINING, JOB PLACEMENT, AND VOCATIONAL FOLLOW-UP.

- 4325 READING-FREE VOCATIONAL INTEREST INVENTORY BR 8-0188, BECKER, RALPH L.,  
OHIO BUREAU OF MENTAL RETARDATION, COLUMBUS, OHIO, 6/24/68-6/23/69,  
INITIAL, \$34,010. OE

THIS PROJECT WILL DEVELOP AND TEST A READING-FREE VOCATIONAL INTEREST  
TEST FOR ADOLESCENT SLOW-LEARNERS AND YOUNG ADULT RETARDATEES  
ENROLLED IN WORK-STUDY AND PRE-VOCATIONAL PROGRAMS.

- 4330 THE APPLICATION FOR EMPLOYMENT AND FOR SEEKING SUCCESS AMONG EDUCABLE  
MENTALLY RETARDED YOUTH BR-6-8576, GREGORY, ROBERT J., SYRACUSE  
UNIVERSITY, SYRACUSE, NEW YORK, 9/1/66-8/31/67 INITIAL, \$4,488. OE

THIS RESEARCH PROPOSES TO INVESTIGATE THE EFFECTS OF INSTRUCTION  
ON TECHNIQUES IN COMPLETING APPLICATIONS FOR EMPLOYMENT AND ON  
ACTUAL PERFORMANCE ON JOB-SEEKING BEHAVIOR BY EDUCABLE MENTALLY  
RETARDED.

- 4332 COGNITIVE DEVELOPMENT IN CHILDREN WITH BRAIN DAMAGE BR 7-1276, BORTNER,  
MORTON, YESHIVA UNIVERSITY, NEW YORK, N.Y., 2/1/68-1/31/70, INITIAL,  
\$57,293. OE

THIS RESEARCH WILL SEEK INFORMATION ON AN AGE-SPECIFIC DEFINITION OF  
THE STRUCTURE OF INTELLECT, DESCRIPTION OF THE PATTERNING OF GROWTH  
OF INTELLECT, AND DESCRIPTION OF THE RELATIONSHIP OF PATTERNS OF  
GROWTH AND INTELLECTUAL ABILITY TO ACADEMIC ACHIEVEMENT IN BRAIN  
DAMAGED CHILDREN.

- 4340 A COOPERATIVE DEMONSTRATION WORK EXPERIENCE FOR MENTALLY RETARDED  
ADOLESCENTS RD-1830-G-D, STONE, SHELLY C., CROSSROADS REHABILITATION  
CENTER, INDIANAPOLIS, INDIANA, 7/1/66-6/30/68 RENEWAL, \$83,918. SRS

THIS RESEARCH INVOLVES COOPERATIVE SPECIAL EDUCATION AND PARALLEL  
WORK EXPERIENCE TO PREPARE MENTALLY RETARDED ADOLESCENTS FOR  
COMMUNITY EMPLOYMENT. IT WILL DEMONSTRATE HOW COORDINATED  
EFFORTS AMONG CROSSROADS REHABILITATION CENTER, THE PUBLIC

SCHOOL SYSTEM, AND STATE VOCATIONAL REHABILITATION DIVISION CAN ASSIST STUDENTS IN MAKING A SUCCESSFUL TRANSITION FROM SCHOOL TO EMPLOYMENT.

- 4350 A COORDINATED PROGRAM OF VOCATIONAL REHABILITATION AND SPECIAL EDUCATION SERVICES FOR MENTALLY RETARDED YOUTH RD-1931-P-D, GRAMMATICAS, CHRIS, WEST SPRINGFIELD PUBLIC SCHOOLS, WEST SPRINGFIELD, MASS., 7/1/66-6/30/68 RENEWAL, \$72,703. SRS

THIS RESEARCH CONCERNS THE ESTABLISHMENT OF AN ORGANIZED PROGRAM OF SELECTION, EVALUATION, GUIDANCE, AND TRAINING OF EDUCABLE MENTALLY RETARDED YOUTH TOWARD ENABLING THEM TO OBTAIN EMPLOYMENT.

- 4370 A STRUCTURED COMMUNITY APPROACH TO COMPLETE SERVICES FOR THE RETARDED RD-1331-G, DOLLINS, CURTIS N., JEWISH VOCATIONAL SERVICE, MILWAUKEE, WISCONSIN, 3/1/67-2/29/69 RENEWAL, \$200,000. SRS

THIS RESEARCH PROPOSES TO DEMONSTRATE A COMPLETE COMMUNITY STRUCTURE OF SERVICES AND AN ORGANIZED TOTAL COMMUNITY APPROACH WHICH CAN AFFECT THE ACHIEVEMENT OF MAXIMUM POTENTIAL FOR DEVELOPMENTAL TRAINING AND VOCATIONAL REHABILITATION FOR RETARDED CHILDREN AND ADULTS IN MILWAUKEE COUNTY. THE PROJECT INVOLVES THE CONCEPT OF A "CONTINUUM OF CARE" AND A "FIXED POINT OF REFERRAL."

- 4390 A WORK EXPERIENCE PROGRAM FOR THE MENTALLY RETARDED CHILD WHO HAS REACHED AGE SIXTEEN YEARS RD-1762, WARNER, DON, OMAHA PUBLIC SCHOOLS, OMAHA, NEBRASKA, 9/1/66-8/31/68 RENEWAL, \$86,655. SRS

THIS RESEARCH PROPOSES AN ORGANIZED, COORDINATED PROGRAM OF ACTIVITIES BETWEEN THE SCHOOL AND THE SHELTERED WORK SHOP WHICH WILL PROVIDE A CONCURRENT EDUCATIONAL-VOCATIONAL EXPERIENCE DESIGNED TO PROVIDE THOSE EMOTIONAL, SOCIAL, AND VOCATIONAL EXPERIENCES THAT ARE CRITICAL IN THE OPTIMAL HABILITATION OF THE RETARDATE.

- 4400 A WORK EXPERIENCE PROGRAM FOR THE MENTALLY RETARDED IN THEIR LAST YEAR OF SCHOOL RD-2058-G-D, CAMPBELL, JOHN L., VOCATIONAL GUIDANCE AND REHABILITATION SERVICES, CLEVELAND, OHIO, 9/1/66-8/31/68 RENEWAL, \$62,982. SRS

THIS RESEARCH CONCERNS THE PROVISION OF A HALF-DAY WORK EXPERIENCE PROGRAM FOR 50 MENTALLY RETARDED ADOLESCENTS WHO ARE WITHIN 1 YEAR OF COMPLETION OF THEIR SCHOOL PROGRAM.

- 4425 COGNITIVE AND ATTITUDINAL-MOTIVATIONAL FACTORS IN PERFORMANCE OF RETARDED

NORMAN A. MILGRAM, RD-2569-P, CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C., 8/1/67-7/31/68, INITIAL, \$26,448. SRS-ORDT

COGNITIVE FACTORS IN RETARDATEES WILL BE DEVELOPED THROUGH THEIR PARTICIPATION IN A NON-VERBAL TRAINING IN LOGIC COURSE. VERBAL AND NON-VERBAL TECHNIQUES TO ASSESS ATTITUDINAL-MOTIVATIONAL VARIABLES THAT AFFECT OPTIMAL USE OF COGNITIVE ABILITIES WILL BE DEVISED.

- 4430 COMMUNITY ORGANIZATION ACTION PLAN FOR THE MENTALLY RETARDED RD-1929-G, TITUS, GARY, COORDINATING COUNCIL ON MENTAL RETARDATION, SAN FRANCISCO, CALIFORNIA, 11/1/66-10/31/68 RENEWAL, \$192,347. SRS

THIS RESEARCH PROPOSES TO INITIATE ACTION ON NEEDED SERVICES; TO INCREASE UTILIZATION OF ALL SERVICES; AND TO PROVIDE CHANNELS FOR EFFECTIVE COORDINATION OF THE DEVELOPMENT OF NEW AND EXPANDED PROGRAMS TO INSURE THE WISEST USE OF MONEY AND MAN-POWER FOR MAXIMUM SERVICE.

- 4440 COMPREHENSIVE COMMUNITY-BASED SERVICES FOR THE RETARDED RD-1435-G, ORZACK, LOUIS, PARENTS AND FRIENDS OF MENTALLY RETARDED CHILDREN OF BRIDGEPORT, INC., BRIDGEPORT, CONNECTICUT, 11/1/66-10/31/68 RENEWAL, \$170,000. SRS

THIS RESEARCH PROPOSES TO DEVELOP A MODEL OF COMPREHENSIVE SERVICES BASED ON THE RESOURCES OF THE COMMUNITY AND TO SHOW THAT SUCH COMMUNITY-BASED SERVICES ARE THE LOGICAL AND MOST EFFECTIVE WAY OF SERVING THE CHANGING NEEDS OF THE INDIVIDUAL RETARDATE.

- 4580 COORDINATED PROGRAM OF VOCATIONAL REHABILITATION AND SPECIAL EDUCATION SERVICES FOR THE MENTALLY RETARDED RD-1681-D, TAYLOR, EDGAR A., JR., MULTANOMAH COUNTY SCHOOLS, PORTLAND, OREGON, 7/1/66-6/30/68, RENEWAL, \$84,569. SRS

THIS RESEARCH AIMS TO IMPROVE AND SYSTEMATIZE THE WORK EVALUATION, WORK ADJUSTMENT AND WORK EXPERIENCE OF YOUNG PEOPLE WHO ARE PHYSICALLY OR MENTALLY HANDICAPPED OR EMOTIONALLY MALADJUSTED. THIS WILL BE DONE THROUGH COOPERATION OF THE PORTLAND SCHOOL DISTRICT, VOCATIONAL REHABILITATION AND GOODWILL INDUSTRIES.

- 4600 COORDINATION REHABILITATION SERVICES FOR THE RETARDED IN A LARGE METROPOLITAN AREA THROUGH LEGALLY CONSTITUTED JOINT PUBLIC AUTHORITY RD-1853-G, MOORING, IVY, MENTAL RETARDATION SERVICES BOARD, LOS ANGELES, CALIFORNIA, 8/1/66-7/31/68, RENEWAL, \$94,016. SRS

THIS RESEARCH CONCERNS THE USE OF A JOINT PUBLIC AUTHORITY TO

STIMULATE COOPERATIVE PLANNING AND COORDINATION OF REHABILITATION SERVICES FOR THE RETARDED. IT SEEKS TO: FILL A POST-SCHOOL "VACUUM" IN SERVICES TO THE RETARDED; ELIMINATE DUPLICATION OF SERVICES; INCREASE UTILIZATION OF PRIVATE AGENCIES' SERVICES; AND IMPROVE COMMUNICATION AMONG AGENCIES.

- 4640 EFFECTS OF DIFFERENTIAL EXPERIENCES ON RETARDED PERSONS LIVING IN RESIDENTIAL CENTERS, RD-1816-P, MICHAEL, M., UNIVERSITY OF HARTFORD, HARTFORD, CONN., 7/1/66-6/30/69, RENEWAL, \$119,546. SRS

THIS RESEARCH CONCERNS A STUDY OF THE POSSIBLE EFFECTS ON THE BEHAVIOR OF RESIDENTS THAT MAY RESULT FROM DIFFERENCES IN LIVING CONDITIONS, SERVICES AND PROGRAMS OF DIFFERENT INSTITUTIONS FOR THE RETARDED.

- 4680 FOLLOW-UP STUDY OF MENTALLY RETARDED PERSONS PLACED WITH FEDERAL GOVERNMENT THROUGH DIVISION OF VOCATIONAL REHABILITATION CERTIFICATION RD-2425-G, OSWALD, HEDWIG, DEPARTMENT OF VOCATIONAL REHABILITATION, WASHINGTON, D.C., 6/1/67-10/31/68, RENEWAL, \$42,194. SRS

NO ABSTRACT SUPPLIED

- 4690 GREATER CLEVELAND MENTAL RETARDATION DEVELOPMENT PROJECT RD-2056-G, BUCKMAN, RILMA OXLEY, WELFARE FEDERATION OF CLEVELAND, CLEVELAND, OHIO, 1/1/67-12/31/68, RENEWAL, \$42,194. SRS

THIS RESEARCH CONCERNS THE ESTABLISHMENT OF A "FIXED POINT OF INFORMATION" ABOUT MENTAL RETARDATION SERVICES; SYSTEMATIC IN-SERVICE TRAINING FOR PROFESSIONALS-IN-PRACTICE; AND ORGANIZATION OF A VOCATIONAL REHABILITATION PROFESSIONAL TEAM TO SUPPLEMENT THE SERVICES AVAILABLE IN THE EXTENDED SHELTERED WORKSHOPS SERVING THE MENTALLY RETARDED.

- 4700 INDUSTRIAL TRAINING RESOURCES IN REHABILITATION PROGRAMS FOR RETARDATE RD-2197-G, ROLANOVICH, DANIEL J., JEWISH EMPLOYMENT AND VOCATIONAL SERVICES, ST. LOUIS, MISSOURI, 8/1/66-7/31/68, RENEWAL, \$89,184. SRS

THIS RESEARCH FOCUSES UPON CURRENT INDUSTRIAL TRAINING APPLICABLE TO REHABILITATION PROJECTS FOR RETARDATE SUCH AS EMPLOYER FACILITIES, EQUIPMENT, AND OPERATIONAL PROCEDURES, CONDITIONS UNDER WHICH THOSE MIGHT BE USED IN A COMMUNITY REHABILITATION PROGRAM, TRAINING MATERIALS AND MEDIA APPLICABLE TO VOCATIONAL TRAINING, AND CONDITIONS UNDER WHICH SUCH METHODS AND MEDIA MIGHT BE PRODUCED CENTRALLY FOR GENERAL USE IN REHABILITATION PROGRAMS.

- 4720 INTER-DISTRICT SCHOOL REHABILITATION PROGRAM FOR LESS ABLE RETARDED ADOLESCENTS RD-1810, HENZE, RICHARD J., EDUCATIONAL RESEARCH AND DEVELOPMENT COUNCIL, MINNEAPOLIS, MINN., 7/1/66-6/30/68, RENEWAL, \$175,287. SRS

THIS RESEARCH CONCERNS WAYS BY WHICH A COMPREHENSIVE SCHOOL-REHABILITATION PROGRAM FOR LESS ABLE MENTALLY RETARDED CAN BE ESTABLISHED THROUGH THE "INTERMEDIATE UNIT" CONCEPT IN EDUCATIONAL ADMINISTRATION AND EXTENDED TO INCLUDE COORDINATION WITH THE DIVISION OF VOCATIONAL REHABILITATION AND SPECIAL EDUCATION AND THE DEPARTMENT OF PUBLIC WELFARE.

- 4730 INTER-GENERATIONAL RELATIONSHIPS IN THE VOCATIONAL REHABILITATION OF MENTALLY RETARDED RD-2346-P, BAXT, ROLAND, FEDERATION EMPLOYMENT AND GUIDANCE SERVICE, NEW YORK, N.Y., 1/1/67-12/31/68, RENEWAL, \$91,911. SRS

THIS RESEARCH PROPOSES TO DEMONSTRATE THE VALUES OF A MULTI-DIMENSIONAL VOCATIONAL REHABILITATION PROGRAM FOR MENTALLY RETARDED ADULTS. A RELATIONSHIP BETWEEN THE RETARDED CLIENT AND AN OLDER DISABLED CLIENT TO PROMOTE THE FORMER'S FEELINGS OF SECURITY IN THE REHABILITATION SETTING AND TO ACCELERATE VOCATIONAL DEVELOPMENT WILL BE USED.

- 4745 NEW APPROACHES TO COMPETITIVE EMPLOYMENT FOR THE MENTALLY RETARDED RD-2686-G, MARVIN BLANK, FLAME OF HOPE, HYANNIS PORT, MASS, 2/1/68-1/31/69, INITIAL, \$80,000. SRS-ORDT

THIS PROJECT PROPOSES TO DEVELOP A CENTRAL MARKETING ORGANIZATION TO ASSIST SHELTERED WORKSHOPS IN MARKETING PRODUCTS MANUFACTURED BY MENTALLY RETARDED WORKERS. A CENTRAL SERVICE FOR THE DEVELOPMENT, DESIGN AND MARKETING OF SALEABLE ITEMS MANUFACTURED BY THE MENTALLY RETARDED WILL BE DEVELOPED.

- 4810 OCCUPATIONAL TRAINING CENTER FOR THE MENTALLY RETARDED RD-2101-G-D, LAMB, LESTER, CARUTH MEMORIAL REHABILITATION CENTER, DALLAS, TEXAS, 3/1/68-2/29/69, RENEWAL, \$76,730. SRS

NO ABSTRACT SUPPLIED

- 4840 PARTICIPATION OF PHS CONTRACT IN MENTAL RETARDATION NIMH-5, U.S. PUBLIC HEALTH SERVICES, WASHINGTON, D.C., 4/15/67-4/15/68, INITIAL,



\$2,000. SRS

NO ABSTRACT SUPPLIED

- 4845 PATTERNING AND TEACHING MONGOLOIDS FINE COORDINATION, RD-2753-P, GERALD E. GATE, OREGON STATE SYSTEM OF HIGHER EDUCATION, MONMOUTH, OREGON, 6/1/68-1/31/69, INITIAL, \$14,712. SRS-ORDT

A PROPOSAL TO DETERMINE WHETHER A DOMAN-DELAUTO DEVELOPED PROCEDURE OF PATTERNED THERAPEUTIC EXERCISES WILL IMPROVE MOTOR COORDINATION IN MONGOLOIDS AND TO COMPARE THE EFFECTS UPON THE COORDINATION OF MONGOLOIDS WITH A SOCIALLY REINFORCED TRAINING PROCEDURE - A PILOT STUDY.

- 4855 SKILL ANALYSIS FOR PREDICTING VOCATIONAL SUCCESS OF THE MENTALLY RETARDED RD-2599-P, HENRY VISCARDI JR., HUMAN RESOURCES CENTER ALBERTSON, N.Y., 7/1/67-6/30/68, INITIAL \$43,435. SRS-ORDT

THE PURPOSE OF THIS RESEARCH IS TO ANALYZE THE NATURE OF SPECIFIC INDUSTRIAL AND CLERICAL JOBS IN TERMS OF INTELLECTUAL, PHYSICAL AND PSYCHOMOTOR PREREQUISITES NECESSARY FOR PREDICTING VOCATIONAL SUCCESS WITH THE MENTALLY RETARDED. EVALUATIVE INSTRUMENTS TO PREDICT PERFORMANCE WILL BE DEVELOPED.

- 4860 SPECIAL SERVICES--RECREATION FOR THE HANDICAPPED RD-2209-G, FREEBERG, WILLIAM H., SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE, ILL., 9/1/66-8/31/68, RENEWAL, \$43,496. SRS

THIS RESEARCH PROPOSES TO DETERMINE THE SPECIFIC RECREATION NEEDS OF THE HANDICAPPED AND TABULATE THEM PERIODICALLY; DIGEST WRITTEN MATERIALS INTO "RECOMMENDED READINGS"; EXAMINE EXISTING RECREATION PROGRAMS AND PREPARE DIGESTS OF THEM INTO "RECOMMENDED PROGRAMS"; SOLICIT INFORMATION REGARDING PROCEDURES FROM EXISTING PROGRAMS AND PREPARE DIGESTS ENTITLED "RECOMMENDED PROCEDURES"; CONTINUE PUBLICATION OF THE NEWSLETTER; AND UPDATE ANNUALLY THE BIBLIOGRAPHY.

- 4870 STATE DVR ROLE IN IMPLEMENTATION OF THE FEDERAL PROGRAM OF THE MENTAL RETARDED; OSWALD, HEDWIG, DEPARTMENT OF VOCATIONAL REHABILITATION, WASHINGTON, D.C., 3/1/67-8/31/68, RENEWAL, \$32,439. SRS

THIS RESEARCH DEALS GENERALLY WITH THE IMPLEMENTATION OF A PROGRAM ESTABLISHED BY THE U.S. CIVIL SERVICE COMMISSION IN ITS FPM LETTER 339-4 OF DEC. 13, 1963, AND IS A FOLLOW-UP ON GRANT #RD-1637-D. THE SAME METHODOLOGY WILL BE USED; CON-

FERENCES, MEETINGS, INTERVIEWS, AND FIELD TRIPS WILL BE ARRANGED TO EXPLORE AND DEMONSTRATE WORKABLE TECHNIQUES FOR CERTIFYING RETARDATEES IN LIFE OF CIVIL SERVICE EXAMINATION.

- 4875 TRAINING OF PROGRAM SUPERVISORS OF MENTALLY RETARDED WORKERS, RD-2471-G, ROBERT A. MARSELLO, RHODE ISLAND ASSOCIATION FOR RETARDED CHILDREN, PROVIDENCE, R.I., 8/1/67-5/31/69, INITIAL, \$41,417. SRS-ORDT

THE PURPOSE OF THIS RESEARCH IS TO DETERMINE WHETHER TRAINING AND PRE-CONDITIONING OF INDUSTRIAL SUPERVISORS IMPROVES THE SUCCESS OF MENTALLY RETARDED EMPLOYEES IN ADJUSTING TO AND RETAINING INDUSTRIAL JOBS.

AMELIORATION - MEDICAL TREATMENT

- 4920 ALBUMIN BINDING CAPACITY AND KERNICTERUS 6919-02, BOGGS, THOMAS R., JR. PENNSYLVANIA HOSPITAL, PHILADELPHIA, PENNSYLVANIA, 2/68-1/69, RENEWAL, \$36,299. NINDS

THIS RESEARCH PROPOSES TO BEGIN A CLINICAL TRIAL OF THE USE OF THE HABA BINDING AS A GUIDE TO THE MANAGEMENT OF THE JAUNDICE INFANT. IN ADDITION, ALL EXCHANGE TRANSFUSIONS, EXCEPT THOSE PERFORMED ON "SICK" ERYTHROBLASTOTIC INFANTS, WILL BE DONE WITH ALBUMIN FORTIFIED WITH DONOR BLOOD. EXPERIENCE SUGGESTS THAT THESE MEASURES WILL REDUCE THE NUMBER OF EXCHANGE TRANSFUSIONS PERFORMED AT THIS INSTITUTION.

- 4925 CONVULSIVE AND ANTICONVULSIVE MECHANISMS IN CHILDREN, 5161-05, MILLICHAP, J. GORDON, CHILDREN'S MEMORIAL HOSPITAL, CHICAGO, ILL., 4/68-3/69, RENEWAL, \$21,384. NINDS

THIS RESEARCH IS CONCERNED WITH THE CONTROL OF SEIZURES AND EEG DISCHARGES AS RELATED TO CHANGES IN LEVELS OF AMINO ACIDS IN URINE AND BLOOD OF INFANTS AND CHILDREN WITH VARIOUS EPILEPSIES.

- 4930 A HOME TRAINING PROGRAM FOR MENTALLY ILL CHILDREN MH-14794-02, FENICHEL, CARL, LEAGUE SCHOOL AND RESEARCH CENTER, BROOKLYN, NEW YORK, 1/68, RENEWAL, \$53,200. NIMH

THIS RESEARCH PROPOSES A HOME-TRAINING AND GUIDANCE PROGRAM AND PLANS TO WORK WITH 24 MENTALLY ILL CHILDREN FROM 3 TO 7 YEARS OF AGE AND THEIR PARENTS.

- 4940 A MENTAL HEALTH CENTER FOR DISTURBED BLIND CHILDREN MH-14751-05,

KASS, WALTER, JEWISH GUILD FOR THE BLIND, NEW YORK, N.Y., 1/68  
RENEWAL, \$84,844. NIMH

THIS RESEARCH SEEKS TO TRANSLATE KNOWLEDGE OF THE PSYCHOLOGY OF BLIND CHILDREN AND THEIR DISTURBED STATES INTO USABLE EDUCATIONAL, DIAGNOSTIC, AND TREATMENT METHODS. KNOWLEDGE AND METHODS DEVELOPED WILL BE MADE AVAILABLE TO THE PROFESSIONAL FIELDS SO THAT AGENCIES, SCHOOLS, AND COMMUNITY CLINICS CAN SERVE THE SO-CALLED "UNEDUCABLE" OR DIFFICULT CHILDREN WHO OTHERWISE CANNOT BE ACCOMMODATED. REFERRALS MAY COME FROM ANY STATE IN THE U.S.

- 4950 AN ENRICHMENT PROGRAM TO REDUCE PHYSICAL RESTRAINT MR-02086-03, GARSTECKI, JOHN M., SOUTHERN WISCONSIN COLONY AND TRAINING SCHOOL, UNION GROVE, WISCONSIN, 1/68-12/68, RENEWAL, \$94,585. SRS

THIS RESEARCH AIMS TO REDUCE THE NUMBER OF PATIENTS WHO ARE PHYSICALLY RESTRAINED BY REDUCING THE NEED FOR THE TYPE OF BEHAVIOR WHICH IS CHARACTERISTIC OF THE GROUP. MORE CREATIVE, ENRICHING EXPERIENCES AND RELATIONSHIPS WILL BE PROVIDED THROUGH ACTIVITIES IN SOCIAL, EXPRESSIVE, AND PHYSICAL AREAS OF DEVELOPMENT.

- 4960 A REDIRECTION OF SCHOOL NURSING SERVICES IN CULTURALLY DEPRIVED NEIGHBORHOODS H-58, BERGAN, DORIS S., OAKLAND PUBLIC SCHOOLS, OAKLAND, CALIFORNIA, 4/1/68-6/30/68, RENEWAL, \$22,298. SRS

THIS RESEARCH CONCERNS THE ASSIGNMENT OF SELECTED ROUTINE FUNCTIONS PERFORMED BY A SCHOOL NURSE TO NON-NURSE ASSISTANTS. WITH THE RELEASED TIME, THE SERVICES OF THE SCHOOL NURSE CAN BE REDIRECTED TO ROUTINE HOME VISITS, PARENT EDUCATION STUDY GROUPS, AND FOLLOW-UP OF HEALTH PROBLEMS AT HOME, SCHOOL, AND THE COMMUNITY.

- 4970 CHILDREN'S PSYCHOPHARMACOLOGY UNIT MH-4665-07, FISH, BARBARA, NEW YORK UNIVERSITY MEDICAL CENTER, NEW YORK, N.Y., 4/68, RENEWAL, \$96,523. NIMH

THIS RESEARCH PROPOSES TO CONTINUE A PROGRAM FOR THE SYSTEMATIC STUDY OF PSYCHOTROPIC DRUGS. STANDARDIZED PSYCHOPHARMACOLOGICAL PROCEDURES FOR CHILDREN IN ORDER TO EVALUATE NEW DRUGS WHICH MAY BE POTENTIALLY USEFUL FOR CHILDREN AND TO DO CONTROLLED STUDIES OF DRUGS WHICH APPEAR THERAPEUTICALLY PROMISING HAVE BEEN DEVELOPED.

- 4990 DEMONSTRATING ADAPTIVE BEHAVIOR-PSYCHIATRIC PROBLEM MH-14901-03,

LELAND, HENRY, AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, COLUMBUS, OHIO, 12/68, RENEWAL, \$88,985. NIMH

THIS RESEARCH PROPOSES TO PROVIDE NEW INFORMATION ON THE USE AND FUNCTION OF ADAPTIVE BEHAVIOR. THIS INFORMATION WILL FURTHER OUR UNDERSTANDING OF THE TREATMENT AND TRAINING NEEDS OF EMOTIONALLY DISTURBED AND MENTALLY RETARDED INDIVIDUALS.

- 5005 HYPERACTIVITY IN CHILDREN R01 03598-01, SPRAGUE, ROBERT L., UNIVERSITY OF ILLINOIS, URBANA, ILL., 6/68-5/71, INITIAL, \$46,159. NICHD

THIS PROJECT PROPOSES TO STUDY THE RELATIONSHIPS BETWEEN THE USE OF MEDICATION AND BEHAVIORAL THERAPY IN HYPERACTIVITY IN EXCEPTIONAL CHILDREN.

- 5020 IMPROVED CARE FOR THE AGING RETARDATE MR-02082-03, BULOW, HARRY VON, STATE COLONY, WOODBINE, NEW JERSEY, 1/68-12/68, RENEWAL, \$38,162. SRS

THIS RESEARCH PROPOSES TO DEVELOP AND IMPLEMENT AN INTENSIVE ACTIVITY PROGRAM IN 2 COTTAGE UNITS HOUSING THE MORE SERIOUSLY RETARDED GERIATRIC TYPE RESIDENTS. THIS IS FOR STIMULATING AND REACTIVATING THESE RESIDENTS TO A FULLER PARTICIPATION IN THE INSTITUTIONAL SETTING.

- 5050 IMPROVEMENT OF LANGUAGE SKILLS IN RETARDED CHILDREN MR-02030-05, BUTTIMORE, DENNIS J., NORTH JERSEY TRAINING SCHOOL, TOTOWA, NEW JERSEY, 6/68-5/69, RENEWAL, \$87,669 SRS

THIS RESEARCH PROPOSES TO CONTINUE AND EXTEND THE WORK IN LANGUAGE DEVELOPMENT AND SPEECH IMPROVEMENT WHICH HAS BEEN UNDER WAY SINCE SEPTEMBER 1964. PARTICULAR INTEREST LIES IN REFINING LANGUAGE TESTS FOR THE VERY YOUNG, SEVERELY RETARDED RESIDENTS SO THAT THEY MAY BE MORE SENSITIVE REFLECTORS OF CHANGES IN LANGUAGE UNDERSTANDING AND USAGE.

- 5060 IMPROVEMENT OF PSYCHO-SENSORY HABILITATION SERVICES MR-02089-03, POTKONSKI, LEOPOLD A., PENNHURST STATE SCHOOL AND HOSPITAL, SPRING CITY, PENNSYLVANIA, 6/68-5/69, RENEWAL, \$70,544. SRS

THIS RESEARCH INVOLVES PROVISION OF A VARIETY OF SENSORY-MOTOR STIMULATION PROCEDURES IN ORDER TO DEVELOP IMPROVED VERBAL COMMUNICATION ABILITIES IN SEVERELY AND PROFOUNDLY RETARDED INSTITUTIONALIZED PATIENTS.

- 5070 IMPROVEMENT OF SERVICE FOR BEDRIDDEN RETARDED MR-02048-03, BORREN,

JAMES G., HISSOM MEMORIAL CENTER, SAND SPRINGS, OKLAHOMA, 2/68-1/69,  
RENEWAL, \$99,451. SRS

THIS RESEARCH PROPOSES TO MAXIMIZE THROUGH SENSORY STIMULATION,  
THE OPPORTUNITY FOR THE MULTIPLY HANDICAPPED RETARDATE TO  
ACHIEVE THE UPPER LIMIT OF HIS POTENTIAL.

- 5080 MAXIMAL STIMULATION AND CARE FOR SEVERELY RETARDED MR-02073-03,  
SCHULTZ, H.F., VINELAND STATE SCHOOL, VINELAND, NEW JERSEY, 9/67-8/68,  
RENEWAL, \$42,844. SRS

THIS RESEARCH ATTEMPTS TO PROVIDE MAXIMAL STIMULATION AND CARE  
FOR 160 SEVERELY AND PROFOUNDLY RETARDED FEMALE RESIDENTS. THE  
RESIDENTS PARTICIPATE IN 1 OR MORE PROGRAMS OF SELF-FEEDING,  
BATHING, TOILET TRAINING, DRESSING, RECREATION, PHYSIO-THERAPY,  
AND SPEECH.

- 5095 METABOLISM OF COPPER AND CALCIUM IN WILSON'S DISEASE, 3655-078  
GOLDSTEIN, N. P., MAYO ASSOCIATION, ROCHESTER, MINN.,  
1/68-12/68, RENEWAL, \$36,170. NINDS

THIS RESEARCH IS CONCERNED WITH METABOLIC BALANCE OF COPPER AND  
CALCIUM FOLLOWING VARYING DOSAGES OF D-PENICILLAMINE, CARBO-RESIN  
AND POTASSIUM SULFIDE. ABSORPTION, STORAGE AND EXCRETION OF COPPER  
AND CALCIUM DURING PERIODS OF TREATMENT AND NON-TREATMENT WILL BE  
STUDIED.

- 5100 MODE OF ACTION OF CONVULSIVE AGENTS, 6298-03, ALEXANDER, GEORGE J.,  
RESEARCH FOUNDATION FOR MENTAL HYGIENCE, INC., NEW YORK, N.Y., 6/68-5/69,  
RENEWAL, \$18,306. NINDS

THIS RESEARCH CONCERNS THE ELUCIDATION OF CHEMICAL CHANGES IN  
THE CENTRAL NERVOUS SYSTEM AND ELSEWHERE IN THE BODY ASSOCIATED  
WITH INDUCTION OF CONVULSIVE SEIZURES. TO THIS END THE EFFECTS  
OF CONVULSANT CHEMICALS IN VITRO WILL BE STUDIED AND CORRELATED  
WITH THE EFFECTS OF THE SAME AGENTS IN SUBCONVULSIVE DOSES IN  
VIVO.

- 5110 PEPTIDURIA IN MENTAL RETARDATION MH-12320-02, BERLOW, STANLEY,  
MICHAEL REESE HOSPITAL AND MEDICAL CENTER, CHICAGO, ILLINOIS,  
1/68, RENEWAL, \$9,216. NIMH

THIS RESEARCH PROPOSES TO STUDY PEPTIDES IN URINE OF RETARDED  
SUBJECTS IN AN EFFORT TO CHARACTERIZE NEW INBORN ERRORS OF META-  
BOLISM.

- 5120 PERINATAL STRESS AND PREMATUREITY RO1 01420-03, BORNHOFEN, JOHN H., UNIVERSITY OF ARKANSAS, LITTLE ROCK, ARKANSAS, 2/68-1/70, RENEWAL, \$27,827. NICHD
- THIS RESEARCH PROPOSES TO CONTINUE INVESTIGATING THE OUTCOME UP TO 5 YEARS OF AGE OF A GROUP OF OVER 200 PREMATURE INFANTS WHO HAD PREVIOUSLY BEEN STUDIED AS NEONATES.
- 5130 PHYSICAL DEVELOPMENT PROGRAM FOR MENTALLY RETARDED MR-02070-03, CAIN, L.W., ABILENE STATE SCHOOL, ABILENE, TEXAS, 9/67-8/68, RENEWAL, \$40,113. SRS
- THIS RESEARCH CONCERNS A PHYSICAL DEVELOPMENT PROGRAM FOR MENTAL RETARDATES WHICH IS DESIGNED TO STIMULATE, CONDITION AND GENERALLY IMPROVE THE ACTIVITY LEVEL OF RESIDENTS WHO HAVE REGRESSED OR DEMONSTRATED SIGNIFICANT DEVELOPMENTAL LAGS IN THE PSYCHOMOTOR AREA.
- 5140 PHYSICAL THERAPY AND RECREATIONAL THERAPY IMPROVEMENT MR-02014-05&05S1, 04S1, MULCAHY, RAYMOND M., BRANDON TRAINING SCHOOL, BRANDON, VERMONT, 6/68-5/69, RENEWAL, \$48,086. SRS
- THIS PROJECT PROPOSES IN PHASE 1, THE DEVELOPMENT OF SELF-CARE SKILLS AND GROUP INTERACTION WITH THE SEVERELY RETARDED CHILD, AND IN PHASE 2, THE CONTINUED DEVELOPMENT OF GROUP INTERACTION AND EMPHASIS IN THE PREVOCATIONAL WORK SKILLS FOR RESIDENTS 10 TO 16 YEARS OF AGE.
- 5150 PSYCHIATRIC TREATMENT PROGRAM FOR ADOLESCENTS MR-02057-04, ADKINS, GALEN H., CAMBRIDGE STATE SCHOOL AND HOSPITAL, CAMBRIDGE, MINNESOTA, 5/68-4/69, RENEWAL, \$74,421. SRS
- THIS RESEARCH PROPOSES TO PROVIDE RESIDENT TREATMENT TO THOSE CHILDREN WHO ARE EMOTIONALLY DISTURBED, PSYCHOTIC, OR HAVE PROBLEMS IN THE AREA OF MENTAL HEALTH WHO ALSO QUALIFY FOR ADMISSION TO OUR HOSPITAL AS RETARDED AND/OR EPILEPTIC. THE ALLEVIATION OF THE PSYCHIATRIC DISABILITY IS THE PRIMARY GOAL BUT THIS HAS TO BE INCLUDED IN THE TOTAL TREATMENT PROCESS.
- 5160 PSYCHO-SOCIAL TREATMENT UNIT MR-02100-02, ZIMMERMAN, JOHN H., WHITE HAVEN STATE SCHOOL AND HOSPITAL, WHITE HAVEN, PENNSYLVANIA, 1/68-12/68, RENEWAL, \$90,000. SRS

THIS RESEARCH CONCERNS THE PREVENTION OF ADOLESCENT MENTALLY RETARDED RESIDENTS FROM BECOMING "INSTITUTIONALIZED" BY ESTABLISHING A PSYCHO-SOCIAL TREATMENT UNIT IN WHICH THE RESIDENTS NEEDS OF ACCEPTANCE, UNDERSTANDING, CONSISTENCY, ETC., ARE MET THROUGH COTTAGE PARENTS.

- 5180 SOCIAL DEVELOPMENT PROGRAM FOR MENTAL RETARDATE MR-02071-03, CAIN, L.W., ABILENE STATE SCHOOL, ABILENE, TEXAS, 9/67-8/68, RENEWAL, \$50,841. SRS

THIS RESEARCH ATTEMPTS TO REVERSE THE REGRESSED BEHAVIORAL TRENDS OF A CRITICAL SEGMENT OF THE EPILEPTIC RESIDENTS BY PROVIDING ADEQUATE ENVIRONMENTAL STIMULATION INCLUDING VERBAL COMMUNICATION AND SOCIAL INTERACTION, PARTICIPATION IN ARTS AND CRAFTS AND MUSIC THERAPY.

- 5200 SPEECH, HEARING AND LANGUAGE PROGRAM, WSH & TC, MR-02046-04, DEAN, ROBERT K., WINFIELD STATE HOSPITAL AND TRAINING CENTER, WINFIELD, KANSAS, 2/1/68-1/31/69, RENEWAL, \$29,778. SRS

THIS RESEARCH PROPOSES TO DEVELOP COMPREHENSIVE AUDIOLOGY, SPEECH PATHOLOGY AND LANGUAGE HABILITATION SERVICES FOR HOSPITAL PATIENTS AND TO PROVIDE AUDIOLOGY AND SPEECH PATHOLOGY SERVICES ON AN OUT-PATIENT AND CONSULTING BASIS TO PEOPLE LIVING IN THE SURROUNDING COMMUNITIES.

- 5210 TEAM MANAGEMENT OF THE AMBULANT SEVERELY RETARDED MR-02098-02, STEVENS, HARVEY A., CENTRAL WISCONSIN COLONY AND TRAINING SCHOOL, MADISON, WISCONSIN, 9/67-8/68, RENEWAL, \$100,000. SRS

THIS RESEARCH PROPOSES DEVELOPMENT OF AN INTERDISCIPLINARY APPROACH TO THE TRAINING AND MANAGEMENT OF 100 AMBULATORY SEVERELY RETARDED ADULTS. METHODS AND TECHNIQUES TO FACILITATE PATIENT GROWTH IN THE SELF-CARE SKILL AREAS WILL BE DEVELOPED.

- 5230 THE EFFECT OF PLASMIN IN HYALINE MEMBRANE DISEASE, (1) R01 02249-06S1, (2) R01 00249-06S2, WEINTRAUB, DAVID H., CHILDREN'S HOSPITAL OF BUFFALO, BUFFALO, NEW YORK, (1) 9/67-8/68, (2) 9/67-8/68, RENEWAL, (1) \$8,635, (2) \$3,846. NICHD

THIS RESEARCH CONCERNS THE TREATMENT OF INFANTS IN RESPIRATORY DISTRESS WITH UROKINASE ACTIVATED HUMAN PLASMIN ON A DOUBLE-BLIND RANDOMIZED BASIS. PHYSICAL, NEUROLOGIC AND PSYCHOLOGIC

PARAMETER OF SURVIVORS IS BEING FOLLOWED WITH THE AIM OF EVALUATING POSSIBLE LATE CONSEQUENCES OF THE DISEASE SYNDROME.

- 5240 THERAPEUTIC MILIEU FOR MENTAL RETARDATE MR-02013-04, TOLL, ARTHUR E., LACONIA STATE SCHOOL, LACONIA, NEW HAMPSHIRE, 5/68-4/69, RENEWAL, \$67,661. SRS

THIS RESEARCH PROPOSES EXTENSIVE AND COMPREHENSIVE MEDICAL, PSYCHOLOGICAL AND EDUCATIONAL EVALUATION OF ALL RESIDENTS AND THE INSTITUTION OF A PROGRAM OF DEVELOPING SELF-CARE SKILLS AMONG THE MODERATELY AND SEVERELY RETARDED RESIDENTS.

- 5250 THERAPEUTIC PROGRAM WITH THE SEVERELY RETARDED MR-02059-03, GRAGG, LOGAN, FRANKFORT STATE HOSPITAL AND SCHOOL, FRANKFORT, KENTUCKY, 6/67-5/68, RENEWAL, \$10,030. SRS

THIS RESEARCH PROPOSES TO DEMONSTRATE THE VALUE OF HAVING A THERAPEUTIC PROGRAM FOR THE SEVERELY RETARDED. THE MAJOR OBJECTIVE IS TO RAISE THE LEVEL OF PERFORMANCE OF THE 117 RESIDENTS IN FEEDING, TOILETING, DRESSING, GROOMING, AND OCCUPATIONAL TRAINING. IT ALSO INCLUDES PLAY THERAPY SESSIONS AND FIELD TRIPS.

- 5255 TREATMENT OF SEROTONIN DEFICIENCY IN MONGOLS, H-256, BAZELON, MARY, CHILDREN'S HOSPITAL OF THE DISTRICT OF COLUMBIA, WASHINGTON, D.C., 3/7/68-2/28/69, INITIAL, \$47,758. SRS

NO ABSTRACT SUPPLIED

- 5260 UP-GRADING OF GENERAL CARE FOR THE SEVERELY RETARDED MR-02006-05, JENKINS, ROBERT A., COLIN ANDERSON CENTER, ST. MARYS, WEST VIRGINIA, 6/68-5/69, RENEWAL, \$38,051. SRS

THIS RESEARCH DIRECTS EFFORTS TOWARDS TOILET TRAINING OF THE MOST SEVERELY RETARDED CHILDREN. THE BASIC PROBLEM CONSISTS OF ESTABLISHING A BOWEL AND BLADDER RHYTHM IN CHILDREN NOT YET TOILET TRAINED. THE NEXT STEP IS SPOON FEEDING AT MEALTIMES.

- 5280 SURVEY OF THE HEALTH NEEDS OF THE ADULT RETARDATE PHS 108-66-166, GRAVINK, MARILYN J., CONNECTICUT STATE DEPARTMENT OF HEALTH, HARTFORD, CONNECTICUT, 6/66-6/68, CONTRACT

NO ABSTRACT SUPPLIED



OTHER

- 5290 A COMMUNITY APPROACH IN THE MANAGEMENT OF DENTAL DISEASE AMONG THE MENTALLY RETARDED, MR-73996, MERGELE, MARVIN E., HARRIS COUNTY CENTER FOR THE RETARDED, HOUSTON, TEXAS, 7/1/68-6/30/72, RENEWAL, \$50,167. SRS

THIS RESEARCH PROPOSES TO DEVELOP A STANDARDIZED ROUTINE OF COMPREHENSIVE DENTAL CARE FOR THE MENTALLY RETARDED, TO PROVIDE A PROGRAM FOR PARENT DENTAL HEALTH EDUCATION AND TO TRAIN PROFESSIONAL PEOPLE IN THE UNIQUE AND COMPLEX PROBLEMS OF THIS GROUP.

- 5300 A COMMUNITY SERVICE DEMONSTRATION PROJECT FOR THE MENTALLY RETARDED IN A RURAL AREA, MR-53995, STEVENS, HARVEY A., STATE OF WISCONSIN DEPARTMENT OF PUBLIC WELFARE, MADISON, WISC., 7/1/68-6/30/70, RENEWAL, \$60,550. SRS

THIS RESEARCH PROPOSES TO STIMULATE THE DEVELOPMENT OF COMMUNITY SERVICES FOR THE MENTALLY RETARDED IN THE RURAL AREAS. THIS WILL LEAD TO A COMPREHENSIVE AND COORDINATED PROGRAM OF SERVICES WITHIN THE CONTEXT OF EXISTING LOCAL AND STATE AGENCIES, PROGRAMS, AND LEGISLATION.

- 5310 A COMPREHENSIVE CLINICAL AND LABORATORY STUDY OF MENTALLY RETARDED AND NEUROLOGICALLY HANDICAPPED CHILDREN, MR-64998, ST. PAUL-RAMSEY HOSPITAL, ST. PAUL, MINNESOTA, 1/1/68-12/31/70, RENEWAL, \$13,076. SRS

THIS PROJECT PROPOSES TO ESTABLISH A CLINIC FOR COMPREHENSIVE DIAGNOSIS AND MANAGEMENT OF RETARDED CHILDREN. STUDENT TRAINING, IDENTIFICATION OF HIGH-RISK FAMILIES AND PARENT COUNSELING ARE ALSO COMPONENTS OF THE PROJECT.

- 5320 A COOPERATIVE REGIONAL APPROACH TO DAY-CARE PROGRAMS MR-73982, BARNETT, CHARLES D., TEXAS DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION, AUSTIN, TEXAS, 9/1/68-8/31/69, RENEWAL, \$55,251. SRS

THIS RESEARCH PROPOSES TO ESTABLISH SATELLITE DAY-CARE PROGRAMS IN COMMUNITIES SURROUNDING THE 2 NEW STATE CENTERS FOR HUMAN DEVELOPMENT; THE DAY-CARE PROGRAMS WILL PROVIDE SERVICES TO THOSE RETARDATEES WHO CANNOT PROFIT FROM OR ARE NOT ELIGIBLE FOR REGULAR SPECIAL EDUCATION PROGRAMS IN THE PUBLIC SCHOOLS.

5330 A COORDINATION CENTER FOR THE RETARDED AND HANDICAPPED MR-0505867, COSAND, MERLE, SAN BERNARDINO COUNTY HEALTH DEPARTMENT, SAN BERNARDINO, CALIFORNIA, 7/1/67-1/31/68, RENEWAL, \$9,681. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A COORDINATION CENTER TO DEVELOP MORE MEANINGFUL USE OF SERVICES BY MENTALLY RETARDED INDIVIDUALS AND SERVE AS A FIXED POINT IN WORKING WITH COMMUNITY RESOURCES IN STABILIZATION AND EXPANSION OF SERVICES FOR PERSONS AFFLICTED WITH MENTAL RETARDATION.

5340 A DEMONSTRATION AND RESEARCH PROGRAM IN HEALTH NEEDS AND HEALTH CARE OF CHILDREN IN DAY CARE H-79, PETERS, ANN DEHUFF, UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, N.C., 11/1/67-10/31/68, RENEWAL, \$149,983. SRS

THIS RESEARCH PROPOSES TO INVESTIGATE IN A CHILD DEVELOPMENT CENTER THE INTELLECTUAL MOTIVATION AND COGNITIVE LEARNING IN CHILDREN FROM INFANCY THROUGH ELEMENTARY SCHOOL AGE. COMPREHENSIVE HEALTH CARE WILL BE GIVEN AND HEALTH PROBLEMS RELATED TO OR INFLUENCED BY GROUP CARE WILL BE STUDIED. COMPARISON WILL BE MADE WITH A CONTROL GROUP IN THE COMMUNITY GIVEN LIMITED HEALTH CARE.

5350 A DEMONSTRATION DAYTIME DEVELOPMENT CENTER PROJECT FOR A SUBURBAN COMMUNITY, MR-34998, KENNEDY, HAROLD, FAIRFAX COUNTY HEALTH DEPARTMENT, FAIRFAX, VIRGINIA, 8/1/68-7/31/69, RENEWAL, \$68,044. SRS

THIS RESEARCH PROPOSES TO ORGANIZE AND INITIATE A COUNTY-WIDE SYSTEM OF DAYTIME DEVELOPMENT CENTERS WHERE A DAILY PROGRAM OF CARE, TRAINING, AND/OR EDUCATION WILL BE PROVIDED FOR THE MENTALLY RETARDED PERSONS WHOSE NEEDS ARE NOT PRESENTLY BEING MET.

5360 A DEMONSTRATION PROGRAM FOR INTENSIVE TRAINING OF INSTITUTIONALIZED MENTALLY RETARDED GIRLS, MR-64999, SPRADLIN, JOSEPH E., BUREAU OF CHILD RESEARCH, UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 7/1/68-6/30/70, RENEWAL, \$112,585. SRS

THIS RESEARCH PROPOSES TO DEMONSTRATE THE APPLICATION OF LABORATORY DERIVED PRINCIPLES IN MODIFYING THE PERSONAL, SOCIAL, EDUCATIONAL AND OCCUPATIONAL BEHAVIOR OF MODERATELY AND SEVERELY RETARDED, INSTITUTIONALIZED GIRLS. THE PRIMARY TECHNIQUE WILL BE SYSTEMATIC, CONTROLLED REWARDING OF DESIRED BEHAVIOR.

5370 A DIAGNOSTIC LABORATORY FOR MENTAL RETARDATION MR-64997, POSER,

CHARLES M., UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI, 9/1/67-8/31/70, RENEWAL, \$12,979. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A LABORATORY WHICH WILL PERMIT THE BIOCHEMICAL, CHROMOSOMAL, NEUROPATHOLOGIC AND HISTOCHEMICAL DIAGNOSTIC WORKUP WHICH IS NOW WELL RECOGNIZED AS BEING MANDATORY FOR THE EVALUATION OF MENTALLY RETARDED INDIVIDUALS.

- 5380 AIDING COGNITIVE GROWTH IN DISADVANTAGED PRESCHOOLER R-300, LEVENSTEIN, PHYLLIS, FAMILY SERVICE ASSOCIATION OF NASSAU COUNTY, INC., MINEOLA, NEW YORK, 7/1/68-6/30/69, RENEWAL, \$66,306. SRS

THE PURPOSE OF THIS RESEARCH IS TO DETERMINE THE EFFECTIVENESS OF EARLY INTERVENTION IN AIDING COGNITIVE GROWTH IN DISADVANTAGED PRE-SCHOOL CHILDREN. 64 MOTHER-CHILD DYADS WILL BE INCLUDED IN THE STUDY 34 IN AN EXPERIMENTAL GROUP AND 30 IN A CONTROL GROUP.

- 5390 A MENTAL RETARDATION COMMUNITY SERVICE CENTER MR-93989, KOCH, RICHARD, CHILDREN'S HOSPITAL OF LOS ANGELES, LOS ANGELES, CALIFORNIA, 7/1/67-6/30/69, RENEWAL, \$110,748. SRS

THIS RESEARCH PROPOSES TO PROVIDE A COMMUNITY RESOURCE FOR DIAGNOSTIC, TREATMENT AND COUNSELING SERVICES FOR RETARDED CHILDREN AND THEIR FAMILIES; A REPOSITORY OF DATA CONCERNING MENTALLY RETARDED CHILDREN MAINTAINED IN THE COMMUNITY; TRAINING FOR PROFESSIONALS IN THE AREA OF MENTAL RETARDATION; AND A FACILITY FOR APPLIED RESEARCH.

- 5400 AN INDEPENDENT LIVING ORIENTED ACTIVITIES PROGRAM FOR THE MENTALLY RETARDED MR-3214A67, DIVISION OF MENTAL RETARDATION, DEPARTMENT OF INSTITUTIONS AND AGENCIES, TRENTON, NEW JERSEY, 9/1/67-8/31/68 INITIAL, \$97,361. SRS

NO ABSTRACT SUPPLIED

- 5410 A PROJECT TO DEMONSTRATE NEW DIRECTIONS IN COMMUNITY PROGRAMMING FOR THE SEVERELY RETARDED ADULT, MR-13994, VENNERT, BERNICE, PARENTS AND FRIENDS OF MENTALLY RETARDED CHILDREN OF BRIDGEPORT, INC., BRIDGEPORT, CONNECTICUT, 9/20/67-12/31/67, RENEWAL, \$13,895. SRS

THIS RESEARCH PROPOSES TO DETERMINE: SUITABLE AND PRODUCTIVE TRAINING ACTIVITIES; SUPPORTIVE AND CONTINUING FAMILY SERVICES; FEASIBILITY OF RETURNING TO THE COMMUNITY A NUMBER OF SEVERELY RETARDED ADULTS NOW RESIDING IN STATE INSTITUTIONS; AND THE ROLE

WITHIN AND RELATIONSHIP TO A COMMUNITY-BASED COMPREHENSIVE SERVICE OF A PROGRAM OF ACTIVITIES.

- 5420 A PROPOSED PROJECT TO DEMONSTRATE THE EFFECTIVENESS OF AN ENVIRONMENTAL STIMULATION SERVICE PROGRAM WITH SEVERELY AND PROFOUNDLY RETARDED, NON-AMBULATORY RESIDENTS AT CLOVER BOTTOM HOSPITAL AND SCHOOL, MR-43976, WADSWORTH, G.L., CLOVER BOTTOM HOSPITAL AND SCHOOL, DONELSON, TENNESSEE, 9/1/67-8/31/69, RENEWAL, \$8,300. SRS

THIS RESEARCH PROVIDES NEUROMUSCULAR, SENSORY AND MOTOR STIMULATION AND WARM, PERSONAL CONTACT WITH ADULTS FOR 187 SEVERELY AND PROFOUNDLY RETARDED NONAMBULATORY RESIDENTS.

- 5440 A RECREATION PROGRAM FOR RETARDED AND MULTIPLE HANDICAPPED CHILDREN: TREK: TOURING THE RETARDED FOR EXPERIENCE AND KNOWLEDGE MR-94997, GANOUNG, LAURA D., EXCEPTIONAL CHILDREN, INC. (CAMP ECHO), TUCSON, ARIZONA, 6/11/68-5/10/69, RENEWAL, \$17,679. SRS

THIS RESEARCH PROPOSES TO PROVIDE MENTALLY RETARDED AND MULTIPLE HANDICAPPED CHILDREN OPPORTUNITY TO DEVELOP SOCIAL COMPETENCE, LANGUAGE EXPERIENCE SKILLS, PERCEPTUAL TRAINING, AND A WIDER SCOPE OF INFORMATION THROUGH A MOBILIZED CAMPING RECREATION PROGRAM.

- 5450 A THERAPEUTIC RESIDENTIAL FACILITY FOR MENTALLY RETARDED YOUNG ADULTS IN THE COMMUNITY, MR-83994, CALABRESE, JOSEPH V., LARADON HALL SOCIETY, DENVER, COLORADO, 7/1/68-6/30/72, RENEWAL, \$76,134. SRS

THIS RESEARCH PROPOSES TO USE A HOUSING FACILITY AS A FORMALIZED TRAINING AND TREATMENT RESOURCE TO ATTEMPT TO SYSTEMATICALLY PREPARE THE YOUNG ADULT MENTAL RETARDATE FOR INDEPENDENT LIFE IN THE COMMUNITY. OPERATING IN CONJUNCTION WITH THE EXISTING LARADON OCCUPATIONAL TRAINING CENTER, THE RESIDENTIAL FACILITY WILL HAVE A CAPACITY OF 40 BEDS, 20 MALE AND 20 FEMALE.

- 5460 ATLANTA ADULT ACTIVITY CENTER, MR-43996, ATLANTA ASSOCIATION FOR RETARDED CHILDREN, ATLANTA, GEORGIA, 7/1/68-6/30/72, RENEWAL, \$53,584. SRS

THE PURPOSE OF THIS PROJECT IS TO ESTABLISH AN ACTIVITY CENTER FOR MODERATELY AND SEVERLY RETARDED ADULTS UNABLE TO BENEFIT FROM TRANSITIONAL WORKSHOP PLACEMENT AND ARE NOT QUALIFIED FOR EMPLOYMENT.

- 5470 A WORK-RELATED CHILD DEVELOPMENT CENTER D-288, KLH CHILD DEVELOP-

MENT CENTER, INC., CAMBRIDGE, MASS., 7/1/68-6/30/69, RENEWAL,  
\$112,118. SRS

THE PURPOSE OF THIS PROJECT IS TO ESTABLISH AN ALL-DAY CHILD DEVELOPMENT AND CARE CENTER IN AN INDUSTRIAL SETTING FOR CHILDREN WHOSE PARENTS ARE EMPLOYED NEARBY. THE CENTER ALSO FUNCTIONS IN COOPERATION WITH INDUSTRY IN PROVIDING EMPLOYMENT FOR PARENTS OF LOW INCOME FAMILIES.

- 5475 A COMMUNICATION SCIENCES RESEARCH PROGRAM, (1) 6459-02S1, (2) 6459-03, MOORE, PAUL, UNIVERSITY OF FLORIDA, GAINESVILLE, FLA., (1) 2/67-1/68, (2) 2/68-1/69, RENEWAL, (1) \$366; (2) \$251,784. NINDS

THE PURPOSE OF THIS PROJECT IS TO DEVELOP AN INTEGRATED PROGRAM OF RESEARCH IN COMMUNICATIONS SCIENCES INVOLVING SCIENTISTS OF VARIOUS DISCIPLINES TO DO RESEARCH IN A SINGLE PROGRAM AND LABORATORY FACILITY.

- 5480 BEHAVIORAL CLASSIFICATION OF NEUROLOGICAL PATIENTS, 3535-07, SIDMAN, MURRAY, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS., 5/68-4/69, RENEWAL, \$91,194. NINDS

THIS RESEARCH PROPOSES TO APPLY RIGOROUS LABORATORY TECHNIQUES TO DETERMINE THE TYPE OF CHANGES THAT HAVE TAKEN PLACE IN THE FUNCTIONAL RELATIONS BETWEEN BEHAVIOR AND ITS CONTROLLING VARIABLES IN NEUROLOGICAL PATIENTS. THE MAIN THEME OF THE WORK WILL BE RESEARCH IN NORMAL AND ABNORMAL CHILD BEHAVIOR AND MENTAL DEVELOPMENT, WITH EMPHASIS UPON DISEASES OF THE CHILD'S NERVOUS SYSTEM.

- 5495 A PROGRAM OF CENTER RESEARCH, PO1 03352-01, HEBER, RICK F., UNIVERSITY OF WISCONSIN, MADISON, WIS., 3/68-2/71, INITIAL, \$130,965. NICHD

NO ABSTRACT SUPPLIED

- 5500 CLINICAL AND LABORATORY STUDIES ON RUBELLA RO1 00737-04, SCHIFF, GILBERT MARTIN, UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO, 2/68-1/72 RENEWAL \$43,720. NICHD

THIS RESEARCH CONCERNS DEVELOPMENT OF MORE PRACTICAL TESTS FOR RUBELLA, SERIOLOGICAL SURVEYS TO DETERMINE IMMUNE STATUS OF THE GENERAL POPULATION TO PROVIDE INFORMATION FOR FUTURE PROPHYLACTIC PROGRAMS, LONGITUDINAL STUDIES ON NEW BORN TO DETERMINE THE INCIDENCE OF CONGENITAL RUBELLA, EVALUATION OF THE EFFICACY

OF GAMMA GLOBULIN TO PREVENT FETAL ABNORMALITIES, AND STUDIES OF  
EPIDEMIOLOGY.

- 5570 COMMUNITY DAY CARE PROGRAM, MR-43995, BISTOWISH, J.M., METRO-  
POLITAN HEALTH DEPARTMENT, NASHVILLE, TENNESSEE, 7/1/68-6/30/70,  
RENEWAL, \$138,522. SRS

THIS RESEARCH PROPOSES A SATELLITE DAY CARE CENTER AND TRAINING  
PROGRAM FOR THE SEVERELY RETARDED CHILDREN AND ADULTS IN DAVIDSON  
COUNTY. SPECIFIC NEEDS OF THE COMMUNITY WILL BE MET BY COOPERA-  
TION WITH PRIVATE AND OFFICIAL AGENCIES, CIVIC AND SERVICE GROUPS  
AND EDUCATIONAL INSTITUTIONS.

- 5580 COMPREHENSIVE CASE-FINDING AND DAY-CARE SERVICES FOR THE TOTALLY  
DEPENDENT CHILD, MR-14999, QUINCY, MASS., 4/1/67-3/31/72, RENEWAL,  
\$40,769. SRS

THIS PROJECT PROPOSES TO DEVELOP A DAY CENTER FOR RETARDED CHILDREN  
DIAGNOSED AS TOTALLY DEPENDENT. CASEFINDING TECHNIQUES WILL BE  
DEVELOPED TO IDENTIFY AND PROVIDE SERVICES TO SEVERELY RETARDED  
PRESCHOOL CHILDREN.

- 5590 COMPREHENSIVE DAY CARE PROGRAM FOR THE MENTALLY RETARDED MR-33991,  
ROSS, C. REID, FAYETTEVILLE CITY BOARD OF EDUCATION, FAYETTEVILLE,  
NORTH CAROLINA, 7/1/68-6/30/70, RENEWAL, \$32,888. SRS

THIS PROJECT PROPOSES TO GIVE DAY CARE SERVICES TO RETARDATEES  
OF ALL AGES BEGINNING WITH THE VERY YOUNG.

- 5600 COMPREHENSIVE DAY PROGRAMS FOR PROFOUNDLY TO MODERATELY RETARDED  
ADULTS MR-0913A67, FRIEDMAN, ERWIN, JEWISH FOUNDATION FOR RETARDED  
CHILDREN, WASHINGTON, D.C., 9/1/67-8/31/68, INITIAL, \$77,214. SRS

THIS RESEARCH PROPOSES TO DEMONSTRATE THE FEASIBILITY AND  
ADVANTAGES OF A COMPREHENSIVE COMMUNITY-BASED ACTIVITY DAY  
CENTER FOR PROFOUNDLY TO MODERATELY RETARDED INDIVIDUALS BE-  
TWEEN THE AGES OF 18 AND 40.

- 5610 COORDINATOR OF SERVICES FOR THE MENTALLY RETARDED IN NATRONA COUNTY  
MR- 83990, NATRONA COUNTY SCHOOL DISTRICT #2, CASPER, WYOMING,  
2/1/68-1/31/70, RENEWAL, \$14,718. SRS

NO ABSTRACT SUPPLIED

- 5620 CREATING THERAPEUTIC PYRAMIDS USING MENTALLY RETARDED PATIENTS  
MR-94996, HENKER, BARBARA A., FAIRVIEW STATE HOSPITAL, COSTA  
MESA, CALIFORNIA, 9/1/67-8/31/69, RENEWAL, \$3,698. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A METHOD FOR TEACHING MENTALLY  
RETARDED PATIENTS (TUTORS) TO MODIFY THE BEHAVIOR OF YOUNGER  
PATIENTS (TRAINEES) BY SYSTEMATICALLY APPLYING THE TECHNIQUES  
OF OPERANT CONDITIONING AND IMITATIVE LEARNING.

- 5630 DAY CARE--ACTIVITY PROGRAM FOR RETARDED ADULTS MR-34995, BLUE GRASS  
ASSOCIATION FOR RETARDED CHILDREN, INC., 3/1/67-2/28/68, LEXINGTON, KY.,  
RENEWAL, \$62,023. SRS

NO ABSTRACT SUPPLIED

- 5650 DAY CARE CENTER DEMONSTRATION PROJECT FOR SEVERELY RETARDED CHILDREN  
MR-64996, ST. LOUIS UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS,  
MISSOURI, 7/1/68-6/30/70, RENEWAL, \$32,498. SRS

THE PROJECT PROPOSES TO ESTABLISH A DAY ACTIVITY CENTER TO PROVIDE  
SERVICES TO RETARDED CHILDREN AND TO BE UTILIZED IN STUDENT  
TRAINING AND RESEARCH AND DEMONSTRATION.

- 5655 DECISION CRITERIA IN ENDOGENOUS MENTALLY RETARDED ADULTS, RD-2625-P,  
WILSON P. TANNER, JR., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH., 4/1/68-  
3/31/69, INITIAL, \$23,570. SRS-ORDT

THIS RESEARCH WILL STUDY THE ROLE OF DECISION CRITERIA IN DECISION  
MAKING BY ENDOGENOUS MENTALLY RETARDED ADULTS. EXPERIMENTAL CASE  
STUDY TECHNIQUES WILL BE DEVELOPED WITHIN THE FRAMEWORK OF SIGNAL  
DETECTABILITY.

- 5660 DEMONSTRATION OF NEW PATHWAYS FOR SERVICES TO THE HOME BOUND MENTALLY  
RETARDED CHILDREN MR-1505867, WOLOSHIN, ARTHUR A., CHARLES F. READ  
ZONE CENTER, CHICAGO, ILLINOIS, 9/1/67-8/31/68, RENEWAL, \$34,398.  
SRS

THIS RESEARCH PROPOSES TO PROVIDE MEANINGFUL SERVICE TO THE  
HOME BOUND RETARDED CHILD AND TO HIS FAMILY; TO MOVE THE CHILD  
BACK INTO THE MAINSTREAM OF COMMUNITY LIFE; TO PREVENT FAMILY  
DISORGANIZATION AND PERSONALITY DISINTEGRATION OF INDIVIDUAL  
FAMILY MEMBERS; AND TO REDUCE PRE-MATURE INSTITUTIONALIZATION

AND REDUCE OVER-CROWDING.

- 5670 DEMONSTRATION PROJECT ILLUSTRATING THE VALUE OF URINARY CHROMATOGRAPHIC SCREENING IN A SELECTED POPULATION OF MENTALLY RETARDED CHILDREN N-0507E67, DONNELL, GEORGE N., CHILDREN'S HOSPITAL OF LOS ANGELES, LOS ANGELES, CALIFORNIA, 7/1/67-6/30/68, RENEWAL, \$43,984. SRS

THIS RESEARCH OFFERS THE PATIENT, HIS FAMILY, AND THE COMMUNITY WELL DEVELOPED BIOCHEMICAL TECHNIQUES FOR THE METABOLIC EVALUATION OF PRESCHOOL, NON-INSTITUTIONALIZED MENTALLY RETARDED CHILDREN.

- 5690 DEVELOPING A MASTER PLAN FOR COMPREHENSIVE COMMUNITY SERVICES FOR THE MENTALLY RETARDED, MR-43975, CIGENIA, ERBERT F., SOUTH CAROLINA RETARDED CHILDREN'S HABILITATION CENTER, CHARLESTON, SOUTH CAROLINA, 1/1/67-12/31/68, RENEWAL, \$42,590. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A CENTRAL FACILITY IN THE CHARLESTON AREA TO COORDINATE A COMPREHENSIVE PROGRAM OF LIFETIME SERVICES TO THE MENTALLY RETARDED. IMPLEMENTATION WILL INVOLVE OFFICIAL AND VOLUNTARY AGENCIES, WILL CREATE ADDITIONAL SERVICES, USE ALL AVAILABLE LOCAL, STATE AND FEDERAL FISCAL RESOURCES, AND USE EXISTING COMMUNITY-BASED MENTAL RETARDATION SERVICE FACILITIES.

- 5700 DEVELOPMENTAL-RECREATION PROGRAM FOR MENTAL RETARDATE MR-74998, L.W. CAIN, ABILENE STATE SCHOOL, ABILENE, TEXAS, 5/1/68-4/30/71, RENEWAL, \$79,935. SRS

THIS RESEARCH PROPOSES INITIATION OF A PHYSICAL-RECREATIONAL TYPE PROGRAM DESIGNED TO IMPROVE THE GENERAL PHYSICAL HEALTH OF ITS 1500-1800 INSTITUTIONALIZED RETARDATE POPULATION. THE PROJECT INCLUDES PHYSICAL STIMULATION, GROUP PARTICIPATION AND COOPERATION, FOSTERING PSYCHOLOGICAL HEALTH, AND NURTURING THE SOCIAL AND EMOTIONAL WELL-BEING OF THE RESIDENTS.

- 5710 DEVELOPMENT OF A DEMONSTRATION DAY CARE CENTER FOR YOUNG CHILDREN D-156, CALDWELL, BETTYE, SYRACUSE UNIVERSITY, SYRACUSE, NEW YORK, 7/1/68-6/30/69, RENEWAL, \$259,368. SRS

THIS RESEARCH FOCUSES UPON CHILDREN 6 MO. TO 3YRS. OF AGE WHOSE MOTHERS WORK; IT PROPOSES TO DETERMINE WHETHER AN APPROPRIATE DAY CARE ENVIRONMENT CAN BE CREATED WHICH CAN OFFSET DEVELOPMENTAL DETRIMENT ASSOCIATED WITH MATERNAL SEPARATION, AND



POSSIBLY ADD A DEGREE OF ENVIRONMENTAL ENRICHMENT FREQUENTLY NOT AVAILABLE IN FAMILIES OF LIMITED RESOURCES.

- 5720 DEVELOPMENT OF A RESIDENT TRAINING SERVICE MR-02039-04, JONES, VERNON, MEXIA STATE SCHOOL, MEXIA, TEXAS, 6/68-5/69, RENEWAL, \$91,419. SRS

THIS PROJECT PROPOSES THE ESTABLISHMENT OF A RESIDENT TRAINING TEAM TO WORK WITH SEVERELY OR PROFOUNDLY RETARDED RESIDENTS WHOSE PROGNOSIS FOR DEVELOPMENT IN ONE OR MORE OF THE SELF-HELP AREAS IS FAVORABLE.

- 5721 INTEGRATION OF EDUCABLE RETARDATE IN NORMAL GROUPS, PUMPHREY, MURIEL, JEWISH COMMUNITY CENTERS ASSOCIATION, ST. LOUIS, MISSOURI, NIMH R01 MH-14424, 6/1/68, INITIAL, \$119,503.

NO ABSTRACT SUPPLIED

- 5730 DEVELOPMENT OF BRAIN ELECTRICAL ACTIVITY OF INFANTS, 6486-03, ELLINGSON ROBERT J., UNIVERSITY OF NEBRASKA, LINCOLN, NEBRASKA, 1/68-12/68, RENEWAL, \$41,193. NINDS

THIS RESEARCH PROPOSES TO: DEVELOP AND/OR REFINE METHODS OF RECORDING AND ANALYZING BRAIN ELECTRICAL ACTIVITY FOR THE STUDY OF THE DEVELOPING HUMAN BRAIN; STUDY LONGITUDINALLY THE DEVELOPMENT OF THOSE ASPECTS OF BRAIN ELECTRICAL ACTIVITY DURING INFANCY; AND RECORD THE CLINICAL DEVELOPMENT OF THE SUBJECTS, AND RELATE FACTORS IN BRAIN ELECTRICAL AND CLINICAL DEVELOPMENT.

- 5740 DEVELOPMENT OF COMPARABLE OBSTETRIC, GYNECOLOGIC AND INFANT TERMINOLOGY AND CLINICAL STATISTICS H-169, HUGHES, EDWARD C., AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS, CHICAGO, ILLINOIS, 8/1/68-7/31/69, RENEWAL, \$46,624. SRS

THIS RESEARCH PROPOSES TO DEVELOP A STANDARD TERMINOLOGY IN OBSTETRICS AND GYNECOLOGY FOR INTERNATIONAL, NATIONAL AND LOCAL STATISTICAL ANALYSIS.

- 5750 DEVELOPMENT OF INDIVIDUAL POTENTIAL OF TRAINABLE RETARDED THROUGH PHYSICAL EDUCATION MR-1903R67, BROWN, BILLY JOE, BLUE GRASS ASSOCIATION FOR RETARDED CHILDREN, LEXINGTON, KENTUCKY, 7/1/67-6/30/68, RENEWAL, \$59,669. SRS

THIS RESEARCH PROPOSES TO DEVELOP INDIVIDUAL POTENTIAL OF THE

TRAINABLE RETARDED THROUGH AN INTENSIVE, COMPREHENSIVE PROGRAM OF PHYSICAL EDUCATION. THE PROJECT IS DESIGNED TO RELATE THE EFFECTS OF HEALTH AND SAFETY INSTRUCTION, PHYSICAL FITNESS AND RECREATION ACTIVITIES TO INTELLECTUAL, SOCIAL, AND VOCATIONAL DEVELOPMENT AND PERFORMANCE.

- 5770 DIAGNOSTIC AND DEMONSTRATION CLINIC IN MENTAL RETARDATION MR-44996, CRUMP, E. PERRY, MEHARRY MEDICAL COLLEGE, NASHVILLE, TENNESSEE, 3/1/68-2/29/69, RENEWAL, \$97,965. SRS

THIS RESEARCH PROPOSES THE SCREENING OF INFANTS AND CHILDREN IN THE PEDIATRIC AGE GROUP FOR MENTAL RETARDATION, AND THE DETAILED EVALUATION OF CASES CONSIDERED TO BE FUNCTIONING AT A LEVEL INDICATIVE OF INTELLECTUAL DEFICIENCY.

- 5780 EARLY CHILD STIMULATION THROUGH PARENT EDUCATION R-306, GORDON, IRA J., UNIVERSITY OF FLORIDA, GAINESVILLE, FLORIDA, 7/1/68-6/30/69, RENEWAL, \$156,448. SRS

THIS PROJECT WILL TRAIN WOMEN FROM DISADVANTAGED BACKGROUNDS TO PERFORM THE ROLE OF PARENT EDUCATOR, A NEW CAREER. THE PARENT EDUCATORS WILL TEACH MOTHERS AT HOME A SERIES OF EXPERIENCES AND TASKS DESIGNED TO INCREASE THE COGNITIVE AND AFFECTIVE DEVELOPMENT OF THE CHILDREN. THE PROJECT WILL INVESTIGATE THE EFFECTIVENESS OF A NON-PROFESSIONAL IN A PARENT EDUCATION ROLE.

- 5800 ENHANCEMENT OF RECREATION SERVICE TO DISABLED CHILDREN C-202, NEW YORK UNIVERSITY, NEW YORK, N.Y., 7/1/67-6/30/68, INITIAL, \$49,312. SRS

NO ABSTRACT SUPPLIED

- 5801 EMPLOYMENT OF THE MENTALLY RETARDED IN COMPETITIVE INDUSTRY - A FILM, RD-2690-G, HENRY VISCARDI, JR., HUMAN RESOURCES CENTER, ALBERTSON, N.Y., 4/1/68-12/31/68, INITIAL, \$7,516. SRS-ORDT

TO DEMONSTRATE PROGRESS MADE AT HUMAN RESOURCES CENTER IN THE FIELD OF VOCATIONAL REHABILITATION OF EDUCABLE MENTALLY RETARDED THROUGH THE DEVELOPMENT AND DISTRIBUTION OF A COLOR AND SOUND MOTION PICTURE.

- 5805 ENVIRONMENTAL CRITERIA: MR DAY CARE FACILITIES MR-07000-01, PATTERSON, JAMES R., TEXAS A&M RESEARCH FOUNDATION, COLLEGE STATION, TEXAS, 5/1/68 - 4/30/70, INITIAL, \$97,463. SRS

THIS PROJECT IS DIRECTED TO THE INCREASING PROBLEM OF PREMATURE OBSESCENCE OF PATIENT CARE FACILITIES. THE OBJECTIVE OF THE WORK IS TO MAKE BUILDINGS FOR PATIENT CARE MORE ADAPTABLE TO THE OFTEN RAPIDLY CHANGING DEMANDS, CREATED BY ADVANCES IN MEDICAL TECHNIQUES AND EQUIPMENT, IMPROVED HOSPITAL OPERATION, AND FLUCTUATING SOCIAL PATTERNS. THESE DEMANDS ARE NOT EASILY MET BY THE EXISTING AND CURRENTLY EMPLOYED BUILDING METHODS.

- 5820 EVALUATING STATE INSTITUTIONS FOR THE RETARDED MR-33976, NISONGER, HERSCHEL W., AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, WASHINGTON, D.C., 7/1/68-6/30/69, RENEWAL, \$59,938. SRS

THIS RESEARCH PROPOSES TO MAKE PROFESSIONAL EVALUATIVE SERVICES AVAILABLE TO ALL STATE RESIDENTIAL INSTITUTIONS FOR THE MENTALLY RETARDED IN THE UNITED STATES.

- 5830 EVALUATION AND CONSULTATION SERVICE FOR MENTAL RETARDATION IN THE UNION COUNTY AREA OF NORTHERN NEW JERSEY MR-3203867, LACROSSE, EDWARD L., AND STONE, NELLIE D., 9/1/67-8/31/68, RENEWAL, \$104,265. SRS

THIS RESEARCH PROPOSES TO DEVELOP A COMPREHENSIVE PROGRAM OF CLINICAL SERVICES IN COORDINATION WITH THE COMMUNITY AND PROFESSIONAL RESOURCES NEEDED TO ASSIST THE MENTALLY RETARDED OF ALL AGES, AND THEIR FAMILIES, TO FUNCTION OPTIMALLY THROUGHOUT THEIR LIFETIMES.

- 5850 EVALUATION OF NUTRITIONAL STATUS OF PRE-SCHOOL CHILDREN IN THE UNITED STATES H-170, OWEN, GEORGE M., CHILDREN'S HOSPITAL RESEARCH FOUNDATION, COLUMBUS, OHIO, 7/1/68-6/30/69, RENEWAL, \$485,499. SRS

THIS RESEARCH CONCERNS THE NUTRITIONAL STATUS OF PRESCHOOL CHILDREN IN THE U.S.; EACH CHILD STUDIED WILL HAVE A DETAILED SOCIAL, MEDICAL AND DIETARY HISTORY, A COMPLETE PHYSICAL EXAMINATION, AND CERTAIN ANTHROPOMETRIC MEASUREMENTS AND A BATTERY OF BIOCHEMICAL DETERMINATIONS MADE WITH SPECIMENS OF BLOOD AND URINE.

- 5880 EVALUATION STUDIES ON MATERNAL AND INFANT CARE PROJECTS PH-700, TAYBACK, MATTHEW, UNIVERSITY OF MARYLAND, COLLEGE PARK, MARYLAND, 7/1/68-6/30/69, RENEWAL, \$180,790. SRS

THIS RESEARCH CONCERNS THE PREPARATION OF EVALUATIVE REPORTS BASED UPON CURRENT DATA SUBMITTED BY COOPERATING PROJECTS

(AUTHORIZED BY THE CHILDREN'S BUREAU) AND TO FURTHER DEVELOP PROTOCOLS FOR EVALUATION OF FAMILY PLANNING AND INFANT CARE SERVICES. EXPLORATORY WORK WILL BEGIN ON COMPREHENSIVE MEDICAL CARE FOR CHILDREN AND YOUTH.

- 5900 FETAL LIFE STUDY -- THE ROLE OF PRENATAL INFLUENCES H-151, MELLIN, GILBERT W., COLUMBIA UNIVERSITY, NEW YORK, N.Y., 7/1/68-6/30/69, RENEWAL, \$59,600. SRS

THIS RESEARCH IS A CLINICAL EPIDEMIOLOGICAL APPROACH TO THE STUDY OF NATURAL AND PATHOLOGY OF HUMAN REPRODUCTION TO DETERMINE THE INCIDENCE OF FETAL DEATHS, NEONATAL DEATHS, BIRTH INJURIES AND CONGENITAL MALFORMATIONS IN A SELECTED POPULATION.

- 5905 HAWAII CHILD STUDY PROJECT, PH-201, WERNER, EMMY E., UNIVERSITY OF CALIFORNIA, DAVIS, CALIF., 7/1/68-6/30/69, RENEWAL, \$7,700. SRS

THE PURPOSE OF THIS PROJECT IS TO PREPARE A MONOGRAPH ON THE KAUAI PREGNANCY AND CHILD STUDY, A LONGITUDINAL STUDY FROM THE PERINATAL PERIOD TO AGE 10 OF 1,000 CHILDREN.

- 5910 HEALTH CARE PATTERNS AMONG LOW INCOME FAMILIES H-74, ALPERT, JOEL J., HARVARD UNIVERSITY, BOSTON, MASS., 7/1/68-6/30/69, RENEWAL, \$112,378. SRS

THIS RESEARCH INTENDS TO DESCRIBE THE HEALTH STATUS AND PATTERNS OF USE OF MEDICAL SERVICES IN A SAMPLE OF URBAN POOR FAMILIES, TO STUDY ACCEPTANCE OR REJECTION AND USE OF A PEDIATRIC CARE PROGRAM, TO ANALYZE THE EFFECTS OF THE PROGRAM AFTER 3 YEARS, AND TO COMPARE COSTS OF THIS PROGRAM WITH TRADITIONAL EPISODIC USE OF MULTIPLE HEALTH RESOURCES.

- 5920 HIGH-RISK INFANT FOLLOW-UP STUDY H-224, UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER, COLORADO, 7/1/68-6/30/69, RENEWAL, \$14,774. SRS

THIS RESEARCH IS A FOLLOW-UP OF HIGH-RISK INFANTS BORN AT THE UNIVERSITY OF COLORADO MEDICAL CENTER FROM JULY, 1963 TO JULY, 1965. A COMPLETE EXAMINATION INCLUDING PHYSICAL, NEUROLOGICAL, PSYCHOLOGICAL SPEECH AND HEARING TESTS WILL BE GIVEN TO EACH CHILD, WEIGHT AT BIRTH AND GESTATIONAL AGE WILL BE PRIMARY FACTORS IN THE STUDY.

- 5930 IMPLEMENTATION GRANT, KENNEDY CENTER, PEABODY P01 02877-02, H088S,

NICHOLAS, GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENNESSEE,  
5/68-4/72, RENEWAL \$61,700. NICHD

THIS RESEARCH PROPOSES TO INCREASE THE EFFECTIVENESS AND PRODUCTIVITY OF THE RESEARCH AND RESEARCH TRAINING PROGRAM OF THE KENNEDY CENTER AT PEABODY. ADMINISTRATIVE ASSISTANCE TO ENSURE COORDINATION AND COMMUNICATION AMONG VARIOUS RESEARCH AND TRAINING ACTIVITIES AND CERTAIN COMMON USE RESOURCES SUCH AS A PRIMATE COLONY, AN APPARATUS SHOP, AND COMPUTER PERSONNEL AND TIME ARE NEEDED.

- 5940 IMPLEMENTING A COOPERATIVE PROGRAM TO PROVIDE A COMPREHENSIVE COMMUNICATION IMPROVEMENT AND COUNSELING SERVICE TO MENTALLY RETARDED CHILDREN, MR-44999, AUGUSTA SPEECH AND HEARING CENTER, AUGUSTA, GEORGIA, 9/1/67-8/31/68, RENEWAL, \$17,469. SRS

NO ABSTRACT SUPPLIED

- 5950 INTENSIFICATION OF RESEARCH IN MENTAL RETARDATION PO1 02553-02, WARKANY, JOSEF, CHILDREN'S HOSPITAL, CINCINNATI, OHIO, 9/67-8/71 RENEWAL \$189,136. NICHD

THIS PROJECT INVOLVES FUNDS FOR A PERIOD BEFORE CERTAIN BUILDINGS ARE READY FOR OCCUPANCY AND FOR FUNDS TO MAKE POSSIBLE ADDITIONAL INVESTIGATIONS IN MENTAL RETARDATION AFTER THE OPENING OF THE INSTITUTE FOR DEVELOPMENTAL RESEARCH WHEN NEW DIVISIONS WILL BE ACTIVATED AND STAFFED.

- 5960 INTERAGENCY CASE INFORMATION SERVICE MR-1702867, BURNETT, WALTER M., BOARD OF CONTROL OF STATE INSTITUTIONS, DES MOINES, IOWA, 1/1/67-12/31/67, RENEWAL, \$52,886. SRS

THIS RESEARCH PROPOSES TO PROVIDE A MEANS FOR THE DISSEMINATION OF CASE INFORMATION ON THE MENTALLY RETARDED TO SELECTED DIRECT SERVICE AGENCIES IN ORDER TO UPGRADE THE QUALITY OF SERVICE THROUGH THE DEVELOPMENT OF A COMPUTERIZED SYSTEM OF DATA COLLECTION, FILING, RETRIEVAL, AND DISSEMINATION.

- 5970 LAW, MENTAL DISORDER AND JUVENILE PROCESSES PR-1600, RESEARCH FOUNDATION OF THE BAR ASSOCIATION OF THE DISTRICT OF COLUMBIA, WASHINGTON, D.C., 7/1/68-6/30/69, RENEWAL, \$86,956. SRS

THIS RESEARCH IS CONCERNED WITH THE POWERS AND PROCEDURES OF THE JUVENILE COURT FOR GAINING ACCESS TO REHABILITATION FACILITIES NECESSARY FOR THE APPROPRIATE TREATMENT AND CARE OF MENTALLY

DISORDERED JUVENILE DELINQUENTS.

- 5975 INTRINSIC AND EXTRINSIC OCULAR DISEASE INVESTIGATIONS, 5691-03, COGAN, DAVID G., MASSACHUSETTS EYE AND EAR INFIRMARY, BOSTON, MASS., 9/67-8/68, RENEWAL, \$403,480. NINDB

THIS PROJECT-CENTER IS CONCERNED WITH CLINICAL RESEARCH IN THE FIELDS OF GLAUCOMA, UVEITIS, NEURO-OPHTHAMOLOGY, RETINAL ANOMOLIES, STRABISMUS AND CORNEAL PROBLEMS.

- 5980 LONGITUDINAL STUDY OF EEG PATTERNS IN CHILDREN, 3418-05, TORRES, FERNANDO, UNIVERSITY OF MINNESOTA MEDICAL SCHOOL, MINNEAPOLIS, MINN., 9/67-8/68, RENEWAL, \$13,963. NINDB

THIS RESEARCH CONCERNS THE PERFORMANCE OF CONCURRENT EEG AND CLINICAL STUDIES ON UNSELECTED CHILDREN WHO HAVE HAD EEG'S AT BIRTH AND WHO NOW HAVE REACHED DIFFERENT AGES. PROGNOSTIC VALUE OF EEG WILL BE TESTED BY COMPARING EARLY ELECTRICAL ABNORMALITIES WITH THE CLINICAL COURSE.

- 6000 MITIGATION OF MENTAL RETARDATION THROUGH EARLY CARE AND MANAGEMENT OF CEREBRAL PALSIED INFANTS - A DEMONSTRATION PROGRAM MR-34996, THE NORTH CAROLINA CEREBRAL PALSY HOSPITAL, DURHAM, NORTH CAROLINA, 7/1/68-6/30/70, RENEWAL, \$35,673. SRS

NO ABSTRACT SUPPLIED

- 6020 NORTH COUNTRY CENTER FOR EXCEPTIONAL CHILDREN, MR-13993, NORTH COUNTRY COMMUNITY SERVICES, BERLIN, NEW HAMPSHIRE, 7/1/68-6/30/71, RENEWAL, \$19,606. SRS

THE PURPOSE OF THIS PROJECT IS TO ESTABLISH A DAY CENTER FOR RETARDED CHILDREN. PART TIME CONSULTANTS ARE EMPLOYED.

- 6030 ONE DAY DIAGNOSTIC AND EVALUATION CLINIC MR-1011A66-S67, WUNDERLICH, RAY C., AMERICAN LEGION CHILDREN'S HOSPITAL, ST. PETERSBURG, FLORIDA, 7/1/66-9/30/67, INITIAL, \$8,019. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A 1-DAY DIAGNOSTIC AND EVALUATION CLINIC. IT IS NEEDED TO FULLY EVALUATE ABBERATIONS IN THE GROWTH, DEVELOPMENT, NEUROLOGICAL STATUS AND INTELLIGENCE OF CHILDREN.

- 6040 PARENT EDUCATION IN CHILD REARING PRACTICES FOR MENTALLY RETARDED

MR-24998, HOLMES, DOUGLAS, ASSOCIATED YM-YWHAS OF GREATER NEW YORK, NEW YORK, N.Y., 7/1/68-6/30/70, RENEWAL, \$47,111. SRS

THIS RESEARCH PROPOSES TO ESTABLISH AMONG PARENTS OF RETARDED CHILDREN EDUCATIVE PROGRAMS DEALING PARTICULARLY WITH THE SOCIAL AND SEXUAL BEHAVIORS OF RETARDATES.

- 6050 PERSONAL DEVELOPMENT AND DAY CARE CENTER, MR-13988, MANCHESTER ASSOCIATION FOR RETARDED CHILDREN, MANCHESTER, NEW HAMPSHIRE, 7/1/68-6/30/70, RENEWAL, \$9,086. SRS

NO ABSTRACT SUPPLIED

- 6060 PLAN TO PROMOTE AND STUDY THE EFFECTIVE UTILIZATION OF NONPROFESSIONAL PERSONNEL IN CHILDREN'S BUREAU RETARDATION CENTERS C-64, MARK, HENRY J., JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND, 7/1/68-6/30/69 RENEWAL, \$37,972. SRS

THIS RESEARCH CONCERNS THE TRAINING OF TECHNICIANS AT 10 CHILDREN'S BUREAU CENTERS TO OPERATE A DECISION-FREE PSYCHOMETRIC DATA COLLECTION ANALYSIS AND REPORT-WRITING TOOL. COMPUTERS LOCATED AT HOPKINS WILL MONITOR THE OUTPUT OF THE 10 CENTERS, KEEP EPIDEMIOLOGIC RECORDS AND TAILOR MODIFIED TOOLS TO THE SENSITIVITY-SPECIFICITY REQUIREMENTS OF EACH CENTER.

- 6070 PROGRAM FOR A RESEARCH CENTER IN MENTAL RETARDATION PO1 02528-02 SCHIEFELBUSCH, R.L., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 1/68-12/68, RENEWAL \$123,078, NICHD

THIS RESEARCH CONCERNS: CREATION OF ADMINISTRATIVE FUNCTIONS, ESPECIALLY CHANNELS FOR PLANNING, COMMUNICATION, COORDINATION, AND MANAGEMENT; DEVELOPMENT OF COMMON FACILITIES FOR RESEARCH SUPPORT AND DEVELOPMENT; IMPLEMENTATION OF NEW RESEARCH AND THE INTENSIFICATION OF MAINTAINING RESEARCH; AND SYNTHESIS OF RESEARCH, RESEARCH APPLICATION, AND RESEARCH TRAINING.

- 6090 PUEBLO COMMUNITY INTERAGENCY MENTAL RETARDATION PROGRAM MR-83984, SMITH, RODNEY M., PUEBLO INTERAGENCY AND CITIZENS' COUNCIL FOR THE SEVERELY HANDICAPPED AND MENTALLY RETARDED, PUEBLO, COLORADO, 9/1/67-8/31/68, RENEWAL, \$55,290. SRS

THIS RESEARCH PROPOSES TO CONTINUE TO PROVIDE FOR THE DEVELOPMENT AND CONTINUED DEMONSTRATION OF A TOTAL COMMUNITY-CENTERED PROGRAM AND APPROACH TO THE PROBLEMS OF THE MENTALLY RETARDED.

6095 RESEARCH UTILIZATION ON RESIDENTIAL SERVICE FOR THE RETARDED, RD-2878-P, MICHAEL KLARER, UNIVERSITY OF HARTFORD, HARTFORD, CONN., 5/1/68-10/31/68, INITIAL, \$20,100. SRS-ORDT

A CONFERENCE TO OBTAIN RESEARCH SUGGESTIONS RELATING TO MORE EFFECTIVE IN-SERVICE TRAINING ROLES OF ADMINISTRATORS AND PROFESSIONALS IN SERVICE SETTINGS AND PARENTAL INVOLVEMENT WITH THE RETARDED CHILD.

6100 RESEARCH IN MENTAL RETARDATION PO1 02712-02, TARJAN, GEORGE, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF. 4/68-3/72, RENEWAL, \$157,325. NICHD

THIS RESEARCH PROPOSES TO ESTABLISH AN INTERDISCIPLINARY RESEARCH PROGRAM AIMED AT SOLVING PROBLEMS IN MENTAL RETARDATION AND RELATED ASPECTS OF HUMAN DEVELOPMENT. BIOMEDICAL AS WELL AS BEHAVIORAL RESEARCH WILL FORM COMPONENTS OF THE PROGRAM, WITH EMPHASIS ON BOTH BASIC AND CLINICAL RESEARCH.

6110 RESEARCH IN MENTAL RETARDATION AND CHILD DEVELOPMENT PO1 02274-02 THIEME, FREDERICK P., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON, 7/67-6/69, RENEWAL, \$61,877 NICHD

THIS RESEARCH CONCERNS SUPPORT FOR THE DIRECTOR AND THE SMALL STAFF NECESSARY TO IMPLEMENT THE MULTI-DISCIPLINARY RESEARCH PROGRAMS OF THE M.R.C.D. CENTER WHICH ARE CONTEMPLATED AND TO PLAN THE NEW FACILITIES IN SUCH A WAY AS TO MAXIMIZE INTERDISCIPLINARY COORDINATION AND SCIENTIFIC PRODUCTIVITY.

6120 RESEARCH IN MENTAL RETARDATION AND HUMAN DEVELOPMENT PO1 01799-03, GORDON, HARRY H., YESHIVA UNIVERSITY, NEW YORK, N.Y., 9/67-8/69 RENEWAL, \$68,570. NICHD

THIS PROJECT CONCERNS SUPPORT OF THE SCIENTIFIC ACTIVITIES OF THE DIRECTOR AND STAFF OF A CENTER FOR RESEARCH IN MENTAL RETARDATION AND HUMAN DEVELOPMENT DURING THE NEXT 4 YEARS OF INITIATION AND EXPANSION OF RESEARCH PROGRAMS, RECRUITMENT OF SCIENTIFIC PERSONNEL, IMPLEMENTATION OF AFFILIATIONS WITH COMMUNITY AGENCIES FOR THE RETARDED, AND DETAILED PLANNING OF NEW RESEARCH FACILITIES IN ORDER TO ENSURE MAXIMUM SCIENTIFIC PRODUCTIVITY.

6125 UNC CHILD DEVELOPMENT AND MENTAL RETARDATION INSTITUTE PO1 03110-01,



ROBINSON, HALBERT B., UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, N.C.,  
9/67-8/69, INITIAL, \$144,148. NICHD

THIS PROJECT WILL BE A BROADLY FOCUSED RESEARCH APPROACH TO  
PROBLEMS OF NORMAL AND PATHOLOGICAL INTELLECTUAL DEVELOPMENT.  
TWO MAJOR AREAS OF STUDY ARE: 1. EFFECTS OF SOCIAL AND CULTURAL  
DEPRIVATION ON INTELLECTUAL DEVELOPMENT. 2. THE MANIFOLD COURSES  
OF BIOLOGICAL MENTAL RETARDATION.

- 6130 SATELLITE DAY CENTERS FOR RETARDED ADULTS MR-23998, GORELICK,  
JACK, ASSOCIATION FOR THE HELP OF RETARDED CHILDREN, NEW YORK CHAPTER,  
NEW YORK, N.Y., 3/1/68-2/28/71, RENEWAL, \$88,550. SRS

THIS RESEARCH AIMS TO ESTABLISH SATELLITE DAY CENTERS IN THE  
VARIOUS BOROUGHES OF THE CITY TO SERVE APPLICANTS ON THE WAITING  
LIST AND TO PROVIDE PROGRAMS CLOSER TO PLACE OF RESIDENCE, TO  
INVESTIGATE THE PUBLIC HEALTH NEEDS OF MODERATELY AND SEVERELY RE-  
TARDED ADULTS, AND TO PROVIDE APPROPRIATE TREATMENT RECOMMENDED  
BY MEDICAL SPECIALISTS.

- 6135 SENSORY INTEGRATIVE PROCESSES AND LEARNING DISORDERS, W-1261, AYRES, A.  
JEAN, UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIFORNIA,  
7/1/68-6/30/69, RENEWAL, \$32,359. SRS

THIS RESEARCH FOCUSES ON SENSORIMOTOR TRAINING TO EMPHASIZE  
INTERSENSORY INTEGRATION OF TACTILE, PROPRIOCEPTIVE, AUDITORY  
AND VISUAL STIMULI THROUGH HYPOTHESIZED CENTRAL NERVOUS SYSTEM  
MECHANISMS AND PRESUMED USE OF THE RETICULAR ACTIVATING SYSTEM.

- 6140 SENSORY DISCRIMINATION AND LEARNING IN INFANTS, 4268-06, LIPSITT,  
LEWIS P., BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND, 9/67-8/68,  
RENEWAL, \$40,200. NINDS

THIS RESEARCH PROPOSES TO EXPLORE THE SENSORY AND LEARNING  
CAPACITIES OF THE HUMAN INFANT FROM BIRTH THROUGH THE FIRST  
YEAR OF LIFE. PROCEDURES HAVE BEEN DEvised AND ARE UNDER  
DEVELOPMENT FOR THE STUDY OF CHANGES IN INFANT BEHAVIOR INDUCED  
THROUGH EXPERIMENTAL CIRCUMSTANCES.

- 6150 SERVICES FOR COMMUNICATION DISORDERS IN A COMMUNITY PROGRAM FOR THE  
MENTALLY RETARDED, MR-44995, WEBB, CLARENCE E., MACDONALD TRAINING  
CENTER FOUNDATION, INC., TAMPA, FLORIDA, 1/1/68-12/31/68, RENEWAL,  
\$14,478. SRS

THIS RESEARCH PROPOSES THE ESTABLISHMENT OF A DEMONSTRATION

PROGRAM IN MENTAL RETARDATION AND SPEECH AND HEARING WITH THE INTENTION OF APPLYING CURRENT KNOWLEDGE TO A COMMUNITY-BASED EFFORT IN COMMUNICATIVE HABILITATION OF THE RETARDED.

- 6160 SHORT TERM ADMISSION PROGRAM MR-02058-03, MANGUM VERNON, O'BERRY CENTER, GOLDSBORO, NORTH CAROLINA, 9/67-12/68, RENEWAL, \$7,538. SRS

THIS PROJECT INVOLVES THE RESERVATION OF 200 BEDS FOR SHORT-TERM ADMISSIONS IN A 1200-BED INSTITUTION; WAITING PERIODS AND ADMISSION RED TAPE HAVE BEEN ELIMINATED. APPLICANTS ARE ACCEPTED FOR 1 YEAR FOR EVALUATION AND TRAINING; THOSE REQUIRING LONG-TERM CARE ARE ASSIGNED LONG-TERM BEDS WHEN AVAILABLE.

- 6161 MENTAL RETARDATION REFERRAL INFORMATION CENTER, KIMMICH, ROBERT A., SAN FRANCISCO COORDINATING COUNCIL ON MENTAL RETARDATION, SAN FRANCISCO, CALIFORNIA, NIMH, R01 MH-14985, 2/68, INITIAL, \$6,778.

NO ABSTRACT SUPPLIED

- 6165 SOCIAL ADJUSTMENT PROGRAM, MR-13989, MANSFIELD TRAINING SCHOOL, MANSFIELD DEPOT, CONN., 7/1/68-6/30/70, RENEWAL, \$62,798. SRS

THE PURPOSE OF THIS PROJECT IS TO ESTABLISH A DAY CARE CENTER WITH A COMPREHENSIVE PROGRAM DESIGNED TO ENABLE ADULT RETARDATEES TO COPE WITH THE PROBLEMS OF IDLENESS AND APATHY.

- 6170 SOCIAL DEVELOPMENT CENTER MR-0525A67, SAN FRANCISCO AID FOR RETARDED CHILDREN, SAN FRANCISCO, CALIFORNIA, 7/1/67-6/30/68, INITIAL, \$49,692. SRS

NO ABSTRACT SUPPLIED

- 6180 STUDY OF MENTAL RETARDATION AND NEUROLOGICAL DISEASES, 5489-03S1, DUNPHY, DONAL, STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA, 1/68-9/68, RENEWAL, \$5,727. NINDS

THIS RESEARCH CONCERNS THE CHILDREN'S RESEARCH UNIT MAKING POSSIBLE THE EXPANSION OF THE CURRENT CLINICAL AND LABORATORY INVESTIGATIONS RELATED TO NEUROLOGICAL DISEASES AND MENTAL RETARDATION NOW BEING CARRIED ON BY MEMBERS OF THE DEPARTMENT OF PEDIATRICS.

- 6190 SUPPLEMENTAL DAYTIME CARE OF INFANTS (GROUP CARE OF INFANTS) D-256, KEISTER, MARY E., UNIVERSITY OF NORTH CAROLINA, GREENSBORO, NORTH CAROLINA, 7/1/68-6/30/69, RENEWAL, \$147,130. SRS

THIS PROJECT WILL ESTABLISH A NURSERY CENTER TO SERVE AS A MODEL FOR DAY CARE OF CHILDREN 3 TO 23 MONTHS. NON-PROFESSIONALS WILL BE TRAINED TO GIVE MOST OF THE CARE TO THE CHILDREN. THE PROGRAM WILL ATTEMPT TO REPLICATE THE EMOTIONAL AND LEARNING MILIEU OF A FAMILY.

- 6200 THE CHILD AND THE STATE (H-91), ELIOT, MARTHA M., AMERICAN PUBLIC HEALTH ASSOCIATION, NEW YORK, N.Y., 6/1/68-5/31/69, RENEWAL, \$107,673. SRS

THIS RESEARCH EMBRACES SOCIAL WELFARE, JUVENILE DELINQUENCY, YOUTH EMPLOYMENT AND CHILD LABOR, HEALTH AND MEDICAL CARE, EDUCATION AND HUMAN RIGHTS. IT IS PROPOSED THAT THE RESEARCH BE USED FOR A NEW AND ENLARGED EDITION OF THE CHILD AND THE STATE BY THE AMERICAN PUBLIC HEALTH ASSOCIATION, AND PUBLISHED BY THE HARVARD UNIVERSITY PRESS.

- 6210 THE DEVELOPMENT AND IMPLEMENTATION OF AN INFORMATION-EDUCATION AND REFERRAL SERVICE SYSTEM FOR THE STATE OF TEXAS PROGRAM IN MENTAL RETARDATION, MR-73992, BARNETT, CHARLES D., TEXAS DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION, AUSTIN, TEXAS., 9/1/67-8/31/68 RENEWAL, \$11,473. SRS

THIS RESEARCH PROPOSES TO ESTABLISH A STATE-LEVEL CLEARING HOUSE FOR AN INFORMATION-EDUCATION AND REFERRAL SERVICE SYSTEM ON MENTAL RETARDATION AND WILL STRIVE TO STRENGTHEN ALL LOCAL AND REGIONAL RESOURCES FOR ACCOMPLISHING MORE EFFECTIVE SERVICES OF THIS NATURE.

- 6230 THE IMPROVEMENT AND EXPANSION OF DIAGNOSTIC, EVALUATIVE AND PREVENTIVE SERVICES FOR MENTALLY RETARDED CHILDREN, MR-74995, ATHANASIOS, SISTER M., INCARNATE WORD COLLEGE, SAN ANTONIO, TEXAS, 9/1/68-8/31/69, RENEWAL, \$78,040. SRS

THIS RESEARCH FOCUSES ON THE EARLY DIAGNOSIS AND PROPER SCHOOL PLACEMENT OF MENTALLY RETARDED CHILDREN FROM LOW INCOME FAMILIES. EARLY DIAGNOSIS AND PROPER PLACEMENT, A MULTIDISCIPLINARY APPROACH TO DIAGNOSTIC EVALUATION, PARENTAL COUNSELING, AND STIMULATION OF INTEREST OF OTHER PROFESSIONALS IN THE COMMUNITY IN THE FIELD OF MENTAL RETARDATION ARE ANTICIPATED.

6240 THE NEW HOPE CENTER, MR-13995, CHESHIRE COUNTY ASSOCIATION FOR RETARDED CHILDREN, KEENE, NEW HAMPSHIRE, 7/1/68-6/30/71, RENEWAL, \$11,496. SRS

THIS PROJECT PROPOSES TO ESTABLISH A DAY CENTER FOR SEVERELY RETARDED CHILDREN AGES FIVE TO SIXTEEN.

6250 TO ESTABLISH A CLINIC IN MISSOULA, MONTANA FOR THE DIAGNOSIS AND THE EVALUATION OF THE RETARDED IN WESTERN MONTANA, AND PROVIDE A TRAINING GROUND FOR PROFESSIONAL PERSONS IN THE RETARDATION FIELD MR-83991, SOULES, MARY E., MONTANA STATE BOARD OF HEALTH, HELENA, MONTANA, 7/1/67-6/30/69, RENEWAL, \$48,706. SRS

THIS RESEARCH, IN ADDITION TO THE PURPOSE STATED IN THE TITLE, ALSO PROPOSES TO: PROVIDE A PROGRAM FOR TRAINING OF A PERSON TO WORK WITH THE RETARDED THROUGHOUT THE STATE; PROVIDE MAXIMUM COORDINATION AND COMMUNICATION SERVICES IN PROGRAMS WHICH MAY BE USED TO ASSIST A RETARDED CHILD OR ADULT AT THE COMMUNITY LEVEL; AND TO ENCOURAGE COMMUNITIES TO ESTABLISH FACILITIES FOR THE RETARDED.

6260 TO ESTABLISH A REGIONAL INFORMATION-REFERRAL CENTER IN GREAT FALLS FOR HANDICAPPED CHILDREN TO DEMONSTRATE ITS FEASIBILITY IN SERVING A LARGE PREDOMINATELY RURAL AREA, MR-83989, GOOGINS, J.A., MONTANA STATE BOARD OF HEALTH, HELENA, MONTANA, 7/1/67-6/30/70, RENEWAL, \$28,653. SRS

THIS PROJECT PROPOSES TO ESTABLISH AN INFORMATION AND REFERRAL CENTER RELATING TO ALL HANDICAPPING CONDITIONS IN CHILDREN. THE CENTER WILL SERVE A SIXTEEN COUNTY AREA IN NORTH CENTRAL MONTANA. THE CENTER WILL ALSO IDENTIFY GAPS IN AVAILABLE SERVICES AND STIMULATE DEVELOPMENT OF NEW SERVICES.

6270 TRAINING AND RESEARCH FACILITY IN CHILD WELFARE SF-200, TURNER, JOHN B., WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, 7/1/68-6/30/69, RENEWAL, \$224,523. SRS

THIS PROJECT PROPOSES TO ESTABLISH A TRAINING AND RESEARCH FACILITY AT A SETTLEMENT HOUSE IN A LOW-INCOME AREA. NEW APPROACHES TO PROGRAM PLANNING AND PROVISION OF SERVICES FOR THE COMMUNITY WILL BE UTILIZED IN TRAINING SOCIAL WORK STUDENTS. THE WELFARE OF CHILDREN WILL RECEIVE PARTICULAR EMPHASIS.

6280 TRANSITION-BUFFER UNIT FOR MENTALLY RETARDED MR-02068-03, RIDDLE,

JOSEPH I., WESTERN CAROLINA CENTER, MORGANTON, NORTH CAROLINA, 9/67-12/68, RENEWAL, \$21,472. SRS

THIS RESEARCH INVOLVES THE PROVISION OF MORE INTENSIVE TREATMENT PROGRAMS FOR CHILDREN CAUGHT BETWEEN EXISTING PROGRAMS, AND THE MOVEMENT OF CHILDREN TO A TRANSITIONAL SUB-UNIT WHERE MORE AND VARIED TREATMENT RESOURCES ARE AVAILABLE.

- 6290 TRI-STATE COMPREHENSIVE PLANNING AND IMPLEMENTATION FOR MENTAL RETARDATION, MR-53982, MILLIKEN, SEWALL O., PUBLIC HEALTH FOUNDATION, CINCINNATI, OHIO, 7/1/66-6/30/69, RENEWAL, \$34,821. SRS

THIS RESEARCH PROPOSES TO STUDY THE POSSIBILITY OF IMPLEMENTING THE RECOMMENDATIONS OF THE COMPREHENSIVE MENTAL RETARDATION PROJECTS IN OHIO, KENTUCKY, AND INDIANA ON A TRI-STATE BASIS. IF FEASIBLE, PROCEDURES WILL BE ESTABLISHED FOR THE USE OF THE REGIONAL TRI-STATE FACILITIES AND SERVICES BY MENTALLY RETARDED PERSONS, IRRESPECTIVE OF STATE BOUNDARIES.

- 6300 UNIFIED APPROACH IN MENTAL RETARDATION WITH NEUROLOGICAL AND SENSORY DISORDERS N-0902E67, GEORGETOWN UNIVERSITY, WASHINGTON, D.C., 4/1/67-3/31/68, RENEWAL, \$1,000,650. SRS

NO ABSTRACT SUPPLIED

- 6330 AN ENRICHMENT PROGRAM TO DEVELOP SELF-HELP SKILLS, MR-02111-02, NELSON, ARTHUR C., NORTHERN WISCONSIN COLONY AND TRAINING SCHOOL, CHIPPEWA FALLS, WISC., 6/1/68-5/31/69, INITIAL, \$106,679. SRS

NO ABSTRACT SUPPLIED

- 6340 AN OPERANT CONDITIONING EDUCATION AND TRAINING UNIT, MR-02109-02, REICHERT, ALBERT, RAINIER SCHOOL, BUCKLEY, WASH., 6/1/68-5/31/69, INITIAL, \$94,846. SRS

NO ABSTRACT SUPPLIED

- 6350 BEHAVIOR MODIFICATION PROGRAM TO DEVELOP SELF-HELP SKILLS, MR-02129-01, SUNADO, KAYO, STATE HOME AND TRAINING SCHOOL, WHEAT RIDGE, COLO., 6/15/68-5/31/69, INITIAL, \$94,523. SRS

NO ABSTRACT SUPPLIED

- 6370 COMPREHENSIVE PROGRAMMING FOR THE SEVERELY RETARDED, MR-02021-01,

LOUISELL, JAMES M., FORT CUSTER STATE HOME, AUGUSTA, MICH., 3/1/68-  
2/28/69, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6380 COORDINATION OF NYC MENTAL RETARDATION PROGRAMS, MR-23018, MED & HEALTH  
RES ASSN OF NYC INC., NEW YORK, N.Y., 6/1/68-5/31/71, INITIAL,  
\$47,587. SRS

NO ABSTRACT SUPPLIED

6390 COTTAGE PROGRAMMING FOR THE PROFOUNDLY AND SEVERELY RETARDED, MR-02120-01  
EDELSON, DAVID, DIXON STATE SCHOOL, DIXON, ILL., 6/1/68-5/31/69,  
INITIAL, \$97,206. SRS

NO ABSTRACT SUPPLIED

6400 CRISES INTERVENTION UNIT FOR RETARDED, MR-02108-02, KANSAS NEUROLOGICAL  
INSTITUTE, TOPEKA, KANS., 6/1/68-5/31/69, INITIAL, \$57,938. SRS

NO ABSTRACT SUPPLIED

6410 DEVELOPMENT OF A COMPREHENSIVE COTTAGE LIFE PROGRAM, MR-02015-05,  
PURSLEY, NORMAN B., GEORGIA DEPT OF PUBLIC HEALTH, ATLANTA, GA.,  
6/1/68-5/31/69, INITIAL, \$98,649. SRS

NO ABSTRACT SUPPLIED

6420 DEVELOPMENT OF A COTTAGE UNIT TEAM PROGRAM, MR-02115-01, CHIOVARO,  
STEPHEN J., BOULDER RIVER SCHOOL AND HOSPITAL, BOULDER, MONT.,  
2/1/68-1/31/69, INITIAL, \$97,300. SRS

NO ABSTRACT SUPPLIED

6430 DEVELOPMENT OF SELF-HELP SOCIAL SKILLS IN INSTITUTIONALIZED SEVERELY  
AND PROFOUNDLY MENTALLY RETARDED PERSONS, MR-02119-01, RETTIG, JUDITH  
H., COLUMBUS STATE SCHOOL, COLUMBUS, OHIO, 6/1/68-5/31/69, INITIAL,  
\$91,087. SRS

NO ABSTRACT SUPPLIED

6440 ELLISVILLE STATE SCHOOL IMPROVEMENT PLAN, MR-02033-04, LANE, CHALMERS K.,

ELLISVILLE STATE SCHOOL, ELLISVILLE, MISS., 9/1/67-8/31/68,  
INITIAL, \$98,000. SRS

NO ABSTRACT SUPPLIED

6450 EVALUATION AND PLANNING TEAM, MR-02037-05, JUNKIN, FRANK E.,  
FIRCREST SCHOOL, SEATTLE, WASH., 6/1/68-5/31/69, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6460 FAMILY CENTER MENTAL RETARDATION NURSING, MR-53997, MUSCATATUCK STATE  
HOSPITAL TRAINING CENTER, BUTLERVILLE, IND., 2/1/68-1/31/69, INITIAL,  
\$22,310. SRS

THIS PROJECT PROPOSES TO EMPLOY TWO NURSES COMPETENT IN THE AREA OF  
MENTAL RETARDATION TO WORK WITH PUBLIC HEALTH NURSES IN ASSESSING  
NEEDS AND PROVIDING HOME SERVICES TO RETARDATEES AND THEIR FAMILIES.

6470 GROUP DAY CARE FOR THE RETARDED IN A RURAL COMMUNITY, MR-63013, MCLEOD  
COUNTY DAY ACTIVITY CENTER, GLENCOE, MINN., 6/1/68-5/31/69, INITIAL,  
\$24,925. SRS

NO ABSTRACT SUPPLIED

6480 HABIT TRAINING OF THE SEVERELY RETARDED, MR-02055-04, DIAMOND, WILLIAM  
D., MOUNT PLEASANT STATE HOME AND TRAINING SCHOOL, MOUNT PLEASANT,  
MICH, 6/1/68-5/31/69, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6490 IMPROVING SELF-CONCEPT IN UNDIFFERENTIATED RETARDATEES, MR-02113-01, CLARK,  
BENJAMIN, P., HAMBURG STATE SCHOOL AND HOSPITAL, HAMBURG, PA.,  
3/1/68-2/28/69, INITIAL, \$91,702. SRS

NO ABSTRACT SUPPLIED

6500 INFORMATION, COUNSELING AND REFERRAL SERVICE FOR MENTALLY RETARDED,  
MR-73991, DALLAS ASSOCIATION FOR RETARDED CHILDREN, DALLAS, TEX.,  
9/1/67-8/31/69, INITIAL, \$18,392. SRS

THIS PROJECT PROPOSES TO ESTABLISH A "FIXED POINT" OF INFORMATION,

REFERRAL AND COUNSELING THE MENTALLY RETARDED AND THEIR FAMILIES IN  
THE DALLAS METROPOLITAN AREA.

6510 INTENSIVE CARE OF YOUNG, RETARDED CHILDREN AT WAIMANO, MR-02003-05,  
IZUTSU, SATORU, WAIMANO TRAINING SCHOOL AND HOSPITAL, PEARL CITY, HAWAII,  
6/1/68-5/31/69, INITIAL, \$52,500. SRS

NO ABSTRACT SUPPLIED

6520 INTENSIVE HABIT-TRAINING CENTER, MR-02116-01, SAGERS, PAUL S., UTAH STATE  
TRAINING SCHOOL, AMERICAN FORK, UTAH, 3/1/68-2/28/69, INITIAL,  
\$91,584. SRS

NO ABSTRACT SUPPLIED

6530 INTENSIVE PROGRAM FOR SEVERELY AND PROFOUNDLY RETARDED, MR-02135-01,  
BAKER, CECIL G., ST LOUIS STATE SCHOOL AND HOSPITAL, ST. LOUIS, MO.,  
6/1/68-5/31/69, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6540 INTENSIVE TRAINING IN BASIC SELF-CARE AND SOCIAL SKILLS, MR-02025-04,  
CHOON DUCK SON, CLOVER BOTTOM HOSPITAL AND SCHOOL, DONELSON, TENNESSEE,  
9/1/67-8/31/68, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6550 INTENSIVE TRAINING UNIT, M/R MULTI-HANDICAPPED WSH & TC, MR-02067-03,  
DEAN, ROBERT K., WINFIELD STATE HOSPITAL AND TRAINING CENTER, WINFIELD,  
KANS., 9/1/67-8/31/68, INITIAL, \$65,941. SRS

NO ABSTRACT SUPPLIED

6560 IOWA CAREER MOTIVATION PROGRAM IN MENTAL RETARDATION, MR-690M1,  
IOWA ASSOCIATION FOR RETARDED CHILDREN, DES MOINES, IOWA, 6/1/67-5/31/68,  
INITIAL, \$1,354. SRS

NO ABSTRACT SUPPLIED

6570 MANSFIELD DEVELOPMENTAL PROGRAM, MR-02026-05, KELLEY, FRANCIS P.,



MANSFIELD TRAINING SCHOOL, MANSFIELD DEPOT, CONN., 6/1/68-5/31/69,  
INITIAL, \$93,925. SRS

NO ABSTRACT SUPPLIED

6580 MENTAL RETARDATION SERVICE FOR TACOMA-PIERCE COUNTY AREA, MR-93988,  
PIERCE COUNTY MENTAL HEALTH AND RETARDATION, TACOMA, WASH., 11/1/67-  
10/31/69, INITIAL, \$45,160. SRS

NO ABSTRACT SUPPLIED

6590 POTENTIALS DEVELOPMENT FOR INDEPENDENT LIVING, MR-02040-04, CHINN, HOWARD  
J., REDFIELD STATE HOSPITAL AND SCHOOL, REDFIELD, S.D., 9/1/67-8/31/68,  
INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6600 PREVENTIVE INTERVENTION FOR RETARDED CHILDREN, MR-02112-01, GROSSMAN,  
HERBERT J., ILLINOIS STATE PEDIATRIC INSTITUTE, CHICAGO, ILL.,  
3/1/68-2/28/69, INITIAL, \$100,000. SRS

NO ABSTRACT SUPPLIED

6610 RESIDENT TRAINING PROJECT, MR-02114-01&01S1, BEAVER, WILLIAM W., LUFKIN  
STATE SCHOOL, LUFKIN, TEX., 6/15/67-8/31/68, INITIAL, \$6,507. SRS

NO ABSTRACT SUPPLIED

6620 RETURN TO THE COMMUNITY OF THE MENTALLY ILL, RD-2847-P, LAMB, RICHARD W.,  
SAN MATEO COUNTY HALL OF JUSTICE AND RECORDS, REDWOOD CITY, CALIF.,  
5/1/68-4/30/69. INITIAL, \$31,250. SRS-ORDT

NO ABSTRACT SUPPLIED

6630 REWARD TRAINING AND BEHAVIOR SHAPING, MR-02032-04, STUCKEY, COATES,  
PINECREST STATE SCHOOL, PINELAND, LA., 2/1/68-1/31/69, INITIAL,  
\$100,000. SRS

NO ABSTRACT SUPPLIED

6640 SELF-CARE PROGRAM FOR ADULT RETARDATE, MR-02017-05, JACKSON, CHRISMAN

S., OUTWOOD STATE HOSPITAL AND SCHOOL, DAWSON SPRINGS, KY., 6/1/68-5/31/69, INITIAL, \$63,229. SRS

NO ABSTRACT SUPPLIED

6650 SELF HELP SKILLS TAUGHT THRU ART-MUSIC INNOVATIONS, MR-02132-01, SCHULTZ, H.F., VINELAND STATE SCHOOL, VINELAND, N.J., 6/15/68-5/31/69, INITIAL, \$43,154. SRS

NO ABSTRACT SUPPLIED

6660 SENSORY STIMULATION IN TRAINING THE PROFOUNDLY RETARDED, MR-02117-01, MERYFORD, FRED W., WYOMING STATE TRAINING SCHOOL, LANDER, WYO., 4/1/68-3/31/69, INITIAL, \$77,159. SRS

NO ABSTRACT SUPPLIED

6670 STIMULATION BY INTENSIVE PHYSICAL AND ACTIVITY THERAPY, MR-02121-01, CRANE, THOMAS P., WILLIAM W. FOX CHILDREN'S CENTER, DWIGHT, ILL., 6/1/68-5/31/69, INITIAL, \$94,207. SRS

NO ABSTRACT SUPPLIED

6680 STUDY OF COOPERATIVE ARRANGMENTS FOR MENTAL HEALTH SERVICE, MR-99013, NO ARIZONA COMPREHENSIVE GUIDANCE CENTER, FLAGSTAFF, ARIZ., 7/1/68-6/30/69, INITIAL, \$39,287. SRS

NO ABSTRACT SUPPLIED

6690 TEACHING BASIC SKILLS TO THE SEVERELY RETARDED, MR-02042-04, PAINE, GERALD F., ENID STATE SCHOOL, ENID, OKLA., 9/1/67-8/31/68, INITIAL, \$99,813. SRS

NO ABSTRACT SUPPLIED

6700 TRAINING CLINICAL PSYCHOLOGISTS FOR THE MENTAL RETARDATION FIELD, MR-49897, UNIVERSITY OF ALABAMA, UNIVERSITY, ALA., 6/1/68-5/31/71, INITIAL, \$72,827. SRS

NO ABSTRACT SUPPLIED

6710 TRAINER-EVALUATORS FOR LOW FUNCTIONAL RETARDATEES, MR-02133-01, LAVIS,

LEONARD W., GLENWOOD STATE HOSPITAL SCHOOL, GLENWOOD, IOWA,  
6/15/68-5/31/69, INITIAL, \$99,500. SRS

NO ABSTRACT SUPPLIED

6720 VOLUNTEER SERVICES PROJECT, MR-02122-01, MULCAHY, RAYMOND M., BRANDON  
TRAINING SCHOOL, BRANDON, VT., 6/1/68-5/31/69, INITIAL, \$19,446. SRS

NO ABSTRACT SUPPLIED

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0240 STUDIES ON THE MECHANISMS OF INFECTIOUS TERATOGENESIS \$23,876  
2080 RED CELL CHANGES AND NEWBORN HYPERBILIRUBINEMIA \$12,985  
2150 STIMULUS FACTORS IN VERBAL LEARNING OF RETARDATEES \$28,614  
2750 CYTOGENETIC STUDIES IN CONGENITAL DISEASES \$3,600  
3440 DETERMINANTS OF LEARNING IN THE MENTALLY RETARDED \$34,900  
3970 THE DEVELOPMENT OF A PHYSICAL EDUCATION PROGRAM FOR TRAINABLE  
MENTALLY RETARDED CHILDREN AND YOUNG ADULTS \$6,856  
6700 TRAINING CLINICAL PSYCHOLOGISTS FOR MENTAL RETARDATION FIELD \$72,827

ARIZONA

0350 BRAIN DAMAGE AND HYPEROXYGENATION IN MENTAL DEFICIT \$25,187  
3240 A DEVELOPMENTAL PROGRAM FOR THE SEVERELY RETARDED \$91,791  
3913 PRE-PROFESSIONAL TRAINING IN MENTAL RETARDATION \$10,525  
5440 A RECREATION PROGRAM FOR RETARDED AND MULTIPLE HANDICAPPED  
CHILDREN: TREK: TOURING THE RETARDED FOR EXPERIENCE AND KNOWLEDGE  
\$17,679  
6680 STUDY OF COOPERATIVE ARRANGEMENTS FOR MENTAL HEALTH SERVICE \$39,287

ARKANSAS

5120 PERINATAL STRESS AND PREMATUREITY \$27,827

CALIFORNIA

0020 BIOLOGIC AND ENVIRONMENTAL FACTORS IN CHILD DEVELOPMENT \$538,543  
0030 BLOOD GROUPING STUDIES \$538,543  
0130 GALACTOSEMIA GENETICS, INCIDENCE AND PATHOPHYSIOLOGY \$44,473  
0590 METABOLIC DISEASES OF THE BRAIN \$77,758



0740 RADIOCOPPER AND RADIOIRON STUDIES IN WILSON'S DISEASE \$33,839  
 0930 SOCIOBEHAVIORAL STUDY CENTER FOR MENTAL RETARDATION \$454,625  
 1025 BACTERIURIA IN THE PREMATURE INFANT \$52,014  
 1055 BILIRUBIN METABOLISM DURING THE PERINATAL PERIOD \$44,139  
 1070 BIOCHEMICAL AND MOLECULAR BASIS OF MENTAL DISEASE \$94,327  
 1230 BIOCHEMICAL DISTURBANCES IN DOWN'S SYNDROME \$33,592  
 1260 BIOCHEMICAL SYSTEMS IN EXPERIMENTAL MENTAL DEFICIENCY \$8,976  
 1340 CEREBROVASCULAR RESPONSE TO EMBRYONIC OVERGROWTH \$7,453  
 1480 EFFECT OF AMINO ACIDS ON METABOLISM, EEG, AND BEHAVIOR \$115,309  
 1550 EXPERIMENTAL PKU INDUCED BY ENZYME INHIBITORS \$24,070  
 1620 FETAL LUNG FLUID \$38,165  
 1660 GROWTH RETARDATION OF THE HUMAN FETUS \$4,817  
 1830 METABOLIC AND CIRCULATORY STUDIES IN INFANTS \$31,640  
 1920 PATHOGENESIS OF CENTRAL NERVOUS SYSTEM MALFORMATIONS \$30,156  
 2050 PREGNANCY ISOIMMUNIZATION IN THE MOUSE \$45,761  
 2060 PRENATAL STIMULATION OF CORTICAL-NEURON PROLIFERATION \$27,079  
 2200 STUDY OF MEIOSIS IN RELATION TO MENTAL RETARDATION \$29,023  
 2330 NEUROPATHOLOGY IN MENTAL ILLNESS AND DEFICIENCY \$40,027  
 2360 BIOCHEMICAL STUDIES OF MYELINATION \$23,197  
 2473 EXPERIMENTAL METABOLIC ENCEPHALOPATHIES \$70,075  
 2490 LIPID COMPOSITION OF BRAIN IN PATHOLOGICAL STATES \$78,719  
 2500 MOLECULAR NEUROBIOLOGY-PROTEINS IN THE NERVOUS SYSTEM \$90,822  
 2695 FORTY-YEAR FOLLOW-UP OF MENTAL RETARDATEES \$83,867  
 2730 CHROMOSOME IDENTIFICATION IN CONGENITAL ANOMALIES \$30,050  
 2880 SLEEPING AND WAKING STATES IN PREMATURE INFANTS \$10,153  
 3020 PERCEPTUAL FACTORS IN EMOTIONAL CONDITIONING \$26,821  
 3030 RETENTION IN AND RETRIEVAL FROM IMMEDIATE MEMORY \$19,477

3040 ANALYSIS OF LOCAL BRAIN IMPEDANCE \$50,538  
 3042 CLINICAL MEASUREMENT OF BRAIN RADIOISOTOPE UPTAKE \$7,999  
 3170 PREVENTION OF ISO-IMMUNIZATION WITH ANTI-RH SERUM \$27,066  
 3370 ADJUSTMENT AND ACHIEVEMENT IN A DESEGREGATED SCHOOL \$269,540  
 3650 TRAINING PROGRAM FOR RETARDED BLIND AND DEAF CHILDREN \$91,977  
 3760 A PILOT PROJECT IN CURRICULUM DEVELOPMENT FOR WORK, EXPERIENCE AND  
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 3770 A STUDY OF THE EFFECTS OF AN INTENSIVE TRAINING PROGRAM ON THE  
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 3850 ESTABLISHMENT OF APPROPRIATE USE OF PRONOUNS AND PREPOSITIONS IN  
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 3950 SPECIAL EDUCATION INSTRUCTIONAL MATERIALS CENTER \$190,763  
 4070 A HABILITATION PROGRAM FOR THE SEVERELY RETARDED \$73,562  
 4110 HABILITATION OF DISTURBED ADOLESCENT MALE RETARDATE \$98,811  
 4430 COMMUNITY ORGANIZATION ACTION PLAN FOR THE MENTALLY RETARDED \$192,397  
 4600 COORDINATION OF REHABILITATION SERVICES FOR THE RETARDED IN A  
 LARGE METROPOLITAN AREA THROUGH LEGALLY CONSTITUTED JOINT PUBLIC  
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 4960 A REDIRECTION OF SCHOOL NURSING SERVICES IN CULTURALLY DEPRIVED  
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 5330 A COORDINATION CENTER FOR THE RETARDED AND HANDICAPPED \$9,681  
 5390 A MENTAL RETARDATION COMMUNITY SERVICE CENTER \$110,748  
 5620 CREATING THERAPEUTIC PYRAMIDS USING MENTALLY RETARDED PATIENTS \$3,698  
 5670 DEMONSTRATION PROJECT ILLUSTRATING THE VALUE OF URINARY CHROMATO-  
 GRAPHIC SCREENING IN A SELECTED POPULATION OF MENTALLY RETARDED  
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 5905 HAWAII CHILD STUDY PROJECT \$7,700

6100 RESEARCH IN MENTAL RETARDATION \$157,325  
 6135 SENSORY INTEGRATIVE PROCESSES AND LEARNING DISORDERS \$32,359  
 6161 MENTAL RETARDATION REFERRAL INFORMATION CENTER \$6,778  
 6170 SOCIAL DEVELOPMENT CENTER \$49,692  
 6620 RETURN TO THE COMMUNITY OF THE MENTALLY ILL \$31,250

#### COLORADO

0175 NEURAL DEFECTS IN VERATRUM-INDUCED CYCLOPIA \$4,513  
 0760 STUDIES IN GENETICALLY-DETERMINED NEUROLOGICAL DISEASES \$75,966  
 0910 HUMAN CHROMOSOMAL DEFECTS-EPIDEMIOLOGY & ETIOLOGY \$8,622  
 1040 BEHAVIOR FOLLOWING REARING IN A RANDOM ENVIRONMENT \$21,339  
 1740 INTERMEDIARY METABOLISM IN PREMATURE INFANTS \$13,641  
 1930 PERCEPTUAL DEVELOPMENT AS RELATED TO READING PROGRESS \$34,121  
 2195 STUDIES ON THE RESPIRATORY DISTRESS SYNDROME \$21,099  
 2618 THE DEVELOPMENT OF NORMAL AND ABNORMAL MYELIN LIPIDS 24,524  
 3310 PROGRAM IMPROVEMENT FOR INSTITUTIONALLY DEPRIVED MALES \$79,700  
 3730 AN EXPERIMENTAL STUDY USING COMPRESSED SPEECH WITH EDUCATIONALLY  
 RETARDED STUDENTS \$8,336  
 5450 A THERAPEUTIC RESIDENTIAL FACILITY FOR MENTALLY RETARDED YOUNG  
 ADULTS IN THE COMMUNITY \$76,134  
 5920 HIGH-RISK INFANT FOLLOW-UP STUDY \$14,774  
 6090 PUEBLO COMMUNITY INTERAGENCY MENTAL RETARDATION PROGRAM \$55,290  
 6350 BEHAVIOR MODIFICATION PROGRAM TO DEVELOP SELF-HELP SKILLS \$94,523

#### CONNECTICUT

0070 CYTOGENETIC STUDIES IN MENTAL RETARDATION \$39,432  
 0650 ONTOGENESIS OF ACTIVITY IN CEREBRAL NEURONS \$18,867  
 1220 BIOCHEMICAL DEVELOPMENT OF SURFACTANT OF LUNG \$41,461

1360 CLASSICAL CONDITIONING OF EYEMOVEMENTS IN RETARDATE \$27,533  
 2530 NEUROPATHOLOGY OF THE AGEING MENTAL RETARDATE \$10,036  
 2685 A COMPREHENSIVE EVALUATION OF HIGH-RISK PREGNANCIES \$225,617  
 2745 COGNITION AND MOTIVATION IN RETARDED INDIVIDUALS \$250,206  
 2800 ELECTRONIC EVALUATION OF FETAL ECG AND HEART RATE \$67,797  
 3010 LEARNING AND TRANSFER PROCESSES IN MENTAL DEFECTIVES \$72,201  
 3250 A PLAN TO REDUCE INSTITUTIONALIZATION OF THE MENTALLY RETARDED \$94,131  
 3540 PRE-PLACEMENT TRAINING PROGRAM \$99,984  
 3914 PROBLEM SOLVING IN THREE SENSE MODALITIES BY MENTALLY RETARDED CHILDREN  
       \$9,324  
 4050 TYPE OF SOLUTION IN THE PROBLEM SOLVING BEHAVIOR OF NORMAL AND  
       MENTALLY-RETARDED CHILDREN \$6,950  
 4440 COMPREHENSIVE COMMUNITY-BASED SERVICES FOR THE RETARDED \$170,000  
 4640 EFFECTS OF DIFFERENTIAL EXPERIENCES ON RETARDED PERSONS LIVING  
       IN RESIDENTIAL CENTERS \$119,546  
 5280 SURVEY OF THE HEALTH NEEDS OF THE ADULT RETARDATE CONTRACT  
 5410 A PROJECT TO DEMONSTRATE NEW DIRECTIONS IN COMMUNITY PROGRAMMING  
       FOR THE SEVERELY RETARDED ADULT \$13,895  
 6095 RESEARCH UTILIZATION ON RESIDENTIAL SERVICE FOR THE RETARDED \$20,100  
 6165 SOCIAL ADJUSTMENT PROGRAM \$62,798  
 6570 MANSFIELD DEVELOPMENTAL PROGRAM \$93,925

#### DELAWARE

3300 PROGRAM FOR THE AMBULATORY SEVERELY RETARDED \$60,180  
 3880 INFLUENCES OF AN ADVANCE ORGANIZER ON THE VERBAL LEARNING AND  
       RETENTION OF EDUCABLE MENTALLY RETARDATE \$33,368

#### DISTRICT OF COLUMBIA

0310 INTELLECTUAL STIMULATION OF CULTURALLY DEPRIVED INFANTS \$101,769  
 1090 BIOCHEMICAL CORRELATES OF CHROMOSOMAL ANOMALIES \$38,367  
 2790 DEVELOPMENT OF EEG AND BEHAVIORAL RESPONSES TO STIMULI \$47,841  
 3120 TECHNIQUES FACILITATING DISCRIMINATION LEARNING \$43,135  
 3180 COLLABORATIVE CROSS-CULTURAL CHILD REARING STUDY \$38,677  
 3200 PREVENTION OF CULTURALLY DETERMINED RETARDATION \$72,000  
 3360 A GROUP DAY CARE PROGRAM FOR CULTURALLY DEPRIVED CHILDREN  
 AND PARENTS \$65,478  
 4100 COORDINATED PROGRAM OF DVR AND PUBLIC SCHOOLS FOR MENTALLY RETARDED  
 \$98,136  
 4425 COGNITIVE AND ATTITUDINAL-MOTIVATIONAL FACTORS IN THE PERFORMANCE  
 OF RETARDED \$26,448  
 4680 FOLLOW-UP STUDY OF MENTALLY RETARDED PERSONS PLACED WITH FEDERAL  
 GOVERNMENT THROUGH DIVISION OF VOCATIONAL REHABILITATION  
 CERTIFICATION \$42,194  
 4840 PARTICIPATION OF PHS CONTRACT ON MENTAL RETARDATION \$2,000  
 4870 STATE DVR ROLE IN IMPLEMENTATION OF THE FEDERAL PROGRAM OF THE  
 MENTAL RETARDED \$32,439  
 5255 TREATMENT OF SEROTONIN DEFICIENCY IN MONGOLS \$47,758  
 5600 COMPREHENSIVE DAY PROGRAMS FOR PROFOUNDLY TO MODERATELY RETARDED  
 ADULTS \$77,214  
 5820 EVALUATING STATE INSTITUTIONS FOR THE RETARDED \$59,938  
 5970 LAW, MENTAL DISORDER AND JUVENILE PROCESSES \$86,956  
 6300 UNIFIED APPROACH IN MENTAL RETARDATION WITH NEUROLOGICAL AND  
 SENSORY DISORDERS \$1,000,650

FLORIDA

0270 TRANSFER OF VIRAL INFECTIONS ACROSS THE PLACENTA \$31,466  
 0940 ABNORMAL AMINO ACID METABOLISM IN MENTAL RETARDATION \$12,700  
 0980 AMINO ACID INTERRELATIONS IN HUMAN METABOLIC DISEASE \$40,354  
 2010 PHYSIOLOGICAL ASPECTS OF PLACENTAL PERMEABILITY \$20,267  
 2860 NEONATAL CRY-SOUND ANALYSIS IN PEDIATRIC DIAGNOSIS \$32,525  
 5475 A COMMUNICATION SCIENCES RESEARCH PROGRAM \$252,150  
 5780 EARLY CHILD STIMULATION THROUGH PARENT EDUCATION \$156,448  
 6030 ONE DAY DIAGNOSTIC AND EVALUATION CLINIC \$8,019  
 6150 SERVICES FOR COMMUNICATION DISORDERS IN A COMMUNITY PROGRAM FOR  
 THE MENTALLY RETARDED \$14,478

#### GEORGIA

0165 INHERITED CYTOGENETIC DEFECTS IN SPONTANEOUS ABORTION \$25,279  
 1030 BASIC CORRELATES OF NEONATAL SUCKING BEHAVIOR \$39,254  
 1465 EARLY EXPERIENCE: INTELLECTUAL AND ADAPTIVE DEVELOPMENT \$31,783  
 1590 FETAL AND NEONATAL DETOXIFICATION MECHANISMS \$29,493  
 1630 FINE STRUCTURE OF ABNORMAL NEUROGENESIS \$30,163  
 5460 ATLANTA ADULT ACTIVITY CENTER \$53,584  
 5940 IMPLEMENTING A COOPERATIVE PROGRAM TO PROVIDE A COMPREHENSIVE  
 COMMUNICATION IMPROVEMENT AND COUNSELING SERVICE TO MENTALLY  
 RETARDED CHILDREN \$17,469  
 6410 DEVELOPMENT OF A COMPREHENSIVE COTTAGE LIFE PROGRAM \$98,649

#### HAWAII

1720 INFANT PSYCHOPHYSIOLOGICAL SYSTEMS \$64,939  
 3740 AN INVESTIGATION OF SELECTED VARIABLES IN THE TEACHING OF SPECIFIED  
 OBJECTIVES TO MENTALLY RETARDED STUDENTS \$50,090  
 4220 INTENSIVE PROGRAM FOR COMMUNITY PLACEMENT \$47,282

6510 INTENSIVE CARE OF YOUNG, RETARDED CHILDREN AT WAIMANO \$52,500

IDAHO

4160 HOME LIVING TRAINING PROGRAM GOAL, HABILITATION \$55,881

ILLINOIS

0040 CAUSES OF MENTAL RETARDATION IN INFANCY \$12,130

0110 ENZYME STUDIES IN CULTIVATED FETAL CELLS \$22,904

0185 NUTRITION, CELL FUNCTION AND GROWTH RETARDATION \$41,624

0300 INTELLECTUAL DEVELOPMENT AND ORPHANAGE EXPERIENCE \$13,065

0605 MINIMAL BRAIN DYSFUNCTION \$4,900

0690 PHOSPHOETHANOLAMINE METABOLISM IN DEVELOPING BRAIN \$11,760

1250 BIOCHEMICAL INVESTIGATION OF MENTAL RETARDATION \$14,548

1300 CARBOHYDRATE METABOLISM IN NEONATE \$27,202

1540 EXPERIMENTAL CNS LESIONS AND PSYCHOSOMATIC MATURATION \$62,082

1780 ISOSENSITIZATION CAUSED BY PREGNANCY OR TRANSFUSION \$15,848

1980 PHENYLALINE AND TRYPTOPHAN HYDROXYLATION IN PKU \$16,525

2130 SHORT-TERM MEMORY IN THE RETARDED CHILD \$21,366

2180 STUDIES OF COGNITIVE FUNCTION IN TURNER'S SYNDROME \$17,328

2747 CONTINGENT CORTICAL D.C. CHANGES IN RETARDED CHILDREN \$23,063

3490 INTENSIVE TRAINING FOR SEVERELY RETARDED CHILDREN \$60,129

3600 PSYCHOLINGUISTIC METHODS FOR CLASSIFYING APHASIA \$43,424

3620 REMEDIATION OF DISTURBED AND RETARDED CHILDREN \$299,971

3722 A SCHOOL PROGRAM FOR YOUNG MONGOLOID CHILDREN \$171,075

3930 RESEARCH IN REMEDIAL GUIDANCE OF YOUNG RETARDED CHILDREN WITH  
BEHAVIOR PROBLEMS WHICH INTERFERE WITH ACADEMIC LEARNING AND  
ADJUSTMENT \$59,497

3952 STUDENT WORK EXPERIENCE AND TRAINING PROGRAM \$8,190

4860 SPECIAL SERVICES--RECREATION FOR THE HANDICAPPED \$43,496  
 4925 CONVULSIVE AND ANTICONVULSIVE MECHANISMS IN CHILDREN \$21,384  
 5005 HYPERACTIVITY IN CHILDREN \$46,159  
 5110 PEPTIDURIA IN MENTAL RETARDATION \$9,216  
 5660 DEMONSTRATION OF NEW PATHWAYS FOR SERVICES TO THE HOME BOUND  
 MENTALLY RETARDED CHILDREN \$34,398  
 5740 DEVELOPMENT OF COMPARABLE OBSTETRIC, GYNECOLOGIC AND INFANT  
 TERMINOLOGY AND CLINICAL STATISTICS \$46,624  
 6390 COTTAGE PROGRAMMING FOR THE PROFOUNDLY AND SEVERELY RETARDED \$97,206  
 6600 PREVENTIVE INTERVENTION FOR RETARDED CHILDREN \$100,000  
 6670 STIMULATION BY INTENSIVE PHYSICAL AND ACTIVITY THERAPY \$94,207

#### INDIANA

0450 EFFECT OF DIET ON LIPIDS AND AMINO ACIDS OF BRAIN \$21,598  
 0810 STUDY OF DIFFUSE DEGENERATIVE CNS DISEASE \$25,234  
 1680 HUMAN CYTOGENETICS \$23,390  
 1910 NUTRITION AND GROWTH OF MENTALLY RETARDED CHILDREN \$22,435  
 2950 AN AUTOMATED PSYCHOLOGICAL TESTING BOOTH \$36,381  
 3480 FUNCTIONAL TRAINING PROGRAM \$100,000  
 3781 AUDITORY PERCEPTUAL ABILITY RELATED TO LANGUAGE ACQUISITION IN MENTALLY  
 RETARDED CHILDREN \$114,986  
 4280 SELF-CARE DEVELOPMENT AND VOCATIONAL HABILITATION \$98,265  
 4340 A COOPERATIVE DEMONSTRATION WORK EXPERIENCE FOR MENTALLY RETARDED  
 ADOLESCENTS \$83,918  
 6460 FAMILY CENTER MENTAL RETARDATION NURSING \$22,310

#### IOWA

0340 ALTERING BILIRUBIN METABOLISM AND KERNICTERUS BY DRUGS \$21,761



2535 NEUROSENSORY CENTER \$170,178  
 2930 A DIAGNOSTIC EVALUATION BRIEF CARE PROGRAM \$88,504  
 3830 DEMONSTRATION OF DISSEMINATION PRACTICES ON SPECIAL CLASS  
 INSTRUCTION FOR THE MENTALLY RETARDED: UTILIZING MASTER TEACHERS  
 AS IN-SERVICE EDUCATORS \$94,531  
 5960 INTERAGENCY CASE INFORMATION SERVICE \$52,886  
 6180 STUDY OF MENTAL RETARDATION AND NEUROLOGICAL DISEASES OF CHILDREN \$5,72  
 6560 IOWA CAREER MOTIVATION PROGRAM MENTAL RETARDATION \$1,354  
 6710 TRAINIER-EVALUATORS FOR LOW FUNCTIONAL RETARDATES \$99,500

#### KANSAS

0550 IMMUNOCHEMICAL STUDIES OF NEURAL DIFFERENTIATION \$110,631  
 1390 COMMUNICATION DISORDERS OF THE MENTALLY RETARDED \$331,296  
 3395 THE DEVELOPMENT OF CULTURALLY DEPRIVED CHILDREN \$200,729  
 3630 THERAPY FOR RETARDATES WITH COMMUNICATION DISORDERS \$110,631  
 3700 A DEMONSTRATION OF THE USE OF THE TEACHER INITIATED STEP-BY-STEP  
 TEACHING SEQUENCE AS A MEANS OF IMPLEMENTATION OF CURRICULAR CONTENT  
 IN CLASSROOMS FOR MILDLY (EDUCABLE) MENTALLY RETARDED \$50,018  
 3721 A LANGUAGE DEVELOPMENT PROGRAM FOR MENTALLY RETARDED CHILDREN  
 \$65,392  
 5200 SPEECH, HEARING, LANGUAGE PROGRAM, WSH & TC \$29,778  
 5360 A DEMONSTRATION PROGRAM FOR INTENSIVE TRAINING OF INSTITUTIONALIZED  
 MENTALLY RETARDED GIRLS \$112,585  
 6070 PROGRAM FOR A RESEARCH CENTER IN MENTAL RETARDATION \$123,078  
 6400 CRISES INTERVENTION UNIT FOR RETARDED \$57,938  
 6550 INTENSIVE TRAINING UNIT, M/R MULTI-HANDICAPPED WSH AND TC \$65,941

#### KENTUCKY

1440 DEVELOPMENT OF HIGH VOLTAGE ELECTROPHORESIS USES \$15,960  
 3220 A CLINICAL WORKSHOP IN MENTAL HEALTH AND PSYCHIATRIC NURSING FOR  
 INSTRUCTORS IN SCHOOLS OF PRACTICAL NURSING \$14,218  
 5250 THERAPEUTIC PROGRAM WITH THE SEVERELY RETARDED \$10,030  
 5630 DAY CARE--ACTIVITY PROGRAM FOR RETARDED ADULTS \$62,023  
 5750 DEVELOPMENT OF INDIVIDUAL POTENTIAL OF TRAINABLE RETARDED  
 THROUGH PHYSICAL EDUCATION \$59,669  
 6640 SELF-CARE PROGRAM FOR ADULT RETARDATEES \$63,229

#### LOUISIANA

1670 HUMAN CHROMOSOMAL ANOMALIES \$1,570  
 1690 HYPERLYSINEMIA: STUDY OF LYSINE METABOLIC PATHWAY \$45,992  
 6630 REWARD TRAINING AND BEHAVIOR SHAPING \$100,000

#### MAINE

0833 THE PATHOGENESIS OF HEREDITARY NEUROLOGICAL DISORDERS \$27,007  
 1650 GENETICS OF BRAIN ANATOMY AND BEHAVIOR \$45,392  
 2190 STUDIES OF NEONATAL BLOOD DISORDERS \$28,800  
 3100 FACTORS CONTRIBUTING TO SUCCESSFUL COMMUNITY ADJUSTMENT OF  
 DISCHARGED RETARDATEES \$34,534

#### MARYLAND

0370 BRAIN METABOLISM AND SYSTEMIC DISEASES \$44,659  
 0470 ENERGY SUPPLY DISORDERS AFFECTING THE FETAL-INFANTILE CNS \$53,037  
 0480 ENZYMATIC FORMATION OF BILE PIGMENTS \$14,883  
 0600 METABOLISM OF GAMMA-HYDROXYBUTYRIC ACID \$31,373  
 0860 VIRAL HEMORRHAGIC ENCEPHALITIS OF RATS \$35,305  
 0880 EPIDEMIOLOGY OF MENTAL RETARDATION IN A RURAL COUNTY \$53,456

1050 BEHAVIOR IN THE PROGENY OF UNDERFED MOTHERS \$26,555  
 1270 BIOLOGIC EFFECTS OF ARO HETEROSPECIFIC PREGNANCY \$55,980  
 1345 CHEMICAL EVALUATION OF FETAL RESPIRATION AND DISTRESS \$21,614  
 1600 FETAL DISTRESS AND ASSOCIATED PLACENTAL CHANGES \$45,726  
 2100 RESPIRATORY STUDIES IN THE NEWBORN PERIOD \$22,120  
 2170 STUDIES IN HUMAN GENETICS \$34,185  
 2300 VALUE OF CONTINUOUS FETAL HEART MONITORING IN LABOR \$8,072  
 2405 CORRELATIVE REFLEX STUDIES IN MAN AND ANIMALS \$6,863  
 2840 LONGITUDINAL AND RELATED PSYCHOHORMONAL STUDIES \$35,209  
 3033 AUDIOLOGICAL STUDY BY EEG OF THE MENTALLY RETARDED \$2,454  
 4250 PRE-VOCATIONAL EXPLORATION IN COMMUNITY LIVING \$97,958  
 5880 EVALUATION STUDIES ON MATERNAL AND INFANT CARE PROJECTS \$180,790  
 6060 PLAN TO PROMOTE AND STUDY THE EFFECTIVE UTILIZATION OF NONPROFESSIONAL  
 PERSONNEL IN CHILDREN'S BUREAU RETARDATION CENTERS \$37,972

#### MASSACHUSETTS

0100 ENVIRONMENTAL LEAD INTOXICATION IN CHILDREN \$10,228  
 0160 INHERITANCE OF RED CELL AND PROTEIN FACTORS IN FAMILIES \$45,006  
 0180 NEUROLOGICAL DEVELOPMENT--INFANTS OF DIABETIC MOTHERS \$15,169  
 0195 PERSISTENT CONGENITAL AND NEONATAL VIRUS INFECTIONS \$44,006  
 0220 RED CELL AND SERUM FACTORS AS GENE MARKERS IN CHILDREN \$46,152  
 0230 STRUCTURAL AND DEVELOPMENTAL GENES IN CHILDREN \$33,605  
 0361 BRAIN LIPIDS IN DIFFUSE DEMYELINATIVE DISEASES \$45,150  
 0425 CYTOGENESIS OF EMBRYONIC HUMAN CENTRAL NERVOUS SYSTEM \$21,477  
 0570 LP AND ASSOCIATED MUTATIONS \$12,360  
 0640 NEW AMINO ACID DISORDERS IN CEREBRAL DISEASE \$67,725  
 0703 PLANNING GRANT; STUDY OF NEONATAL HYPERBILIRUBINEMIA \$6,000

0800 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN \$28,457  
 0820 STUDY OF HYPERBILIRUBINEMIA IN THE NEWBORN \$28,655  
 1610 FETAL INSULIN AND ANTI-RH SENSITIZATION \$23,334  
 1925 PATHOGENES OF CHRONIC INFECTIONS \$165,738  
 2120 SALIVARY GLAND PHYSIOLOGY IN MONGOLISM \$21,608  
 2160 STUDIES IN EXPERIMENTAL ERYTHROBLASTOSIS FETALIS \$54,778  
 2493 METABOLISM AND FUNCTION OF COMPLEX LIPIDS \$51,881  
 2550 PATHOGENESIS OF INHERITED DEVELOPMENTAL BRAIN DISEASE \$54,304  
 2570 QUANTITATIVE HISTOCHEMICAL STUDIES UPON CEREBRAL CORTEX \$19,016  
 2690 ADAPTIVE BEHAVIOR AND EEG IN MENTAL RETARDS \$24,375  
 2870 QUANTITATIVE HUMAN CHROMOSOME STUDY AIDED BY COMPUTER \$29,809  
 2910 A BEHAVIOR EVALUATION PROGRAM FOR RETARDED CHILDREN \$57,654  
 3060 AN EDUCATIONAL TEST OF THE LEARNING POTENTIAL HYPOTHESIS WITH  
 ADOLESCENT MENTALLY RETARDED SPECIAL CLASS CHILDREN \$6,005  
 3400 A CHILD EXPERIENCE ENRICHMENT PROJECT \$92,801  
 3500 LEARNING POTENTIAL AMONG THE EDUCABLE RETARDED \$48,820  
 3660 TRAINING SEVERELY RETARDED ADULTS FROM THE BACKWARDS \$76,176  
 3670 TRAINING THE UNTRAINABLES AT WRENTHAM STATE SCHOOL \$100,000  
 3901 LEARNING POTENTIAL AND EDUCABILITY AMONG THE EDUCABLY MENTALLY RETARDED  
 \$312,187  
 4051 VERBAL OPERANT CONDITIONING OF YOUNG MONGOLOID CHILDREN \$4,500  
 4080 AN IMPROVED PROGRAM FOR HABILITATION OF THE RETARDED \$92,801  
 4350 A COORDINATED PROGRAM OF VOCATIONAL REHABILITATION AND SPECIAL  
 EDUCATION SERVICES FOR MENTALLY RETARDED YOUTH \$72,703  
 4745 NEW APPROACHES TO COMPETITIVE EMPLOYMENT FOR THE MENTALLY RETARDED  
 \$80,000  
 5470 A WORK-RELATED CHILD DEVELOPMENT CENTER \$112,118

5480 BEHAVIORAL CLASSIFICATION OF NEUROLOGICAL PATIENTS \$91,194  
 5580 COMPREHENSIVE CASE-FINDING AND DAY-CARE SERVICES FOR THE TOTALLY  
 DEPENDENT CHILD \$40,769  
 5910 HEALTH CARE PATTERNS AMONG LOW INCOME FAMILIES \$112,378  
 5975 INTRINSIC AND EXTRINSIC OCULAR DISEASE INVESTIGATIONS \$403,480

#### MICHIGAN

0150 HASHIMOTO'S STRUMA AND CONGENITAL HYPOTHYROIDISM \$33,451  
 0730 RADIATION AND MORPHOLOGIC AND BEHAVIORAL DEVELOPMENT \$16,780  
 1625 FIBRINATION-FIBRINOLYSIS, PATHOGENESIS IN PREGNANCY \$28,032  
 2000 PHOSPHOLIPID METABOLISM DURING DEVELOPMENT \$16,116  
 2260 TRANSPLACENTAL PASSAGE OF FETAL ERYTHROCYTES \$47,720  
 2400 CEREBRAL ENZYMES IN NORMAL AND CONVULSIVE STATES \$74,574  
 2510 MORPHOLOGY AND CYTOCHEMISTRY OF DEVELOPING SYNAPSES \$79,826  
 2650 CNS AND NUTRITIONAL INFLUENCES OF AMINO ACIDS IN PKU \$11,872  
 3044 COGNITIVE DEFICITS AND BRAIN DYSFUNCTION \$44,235  
 3470 ENRICHED ENVIRONMENT FOR YOUNG RETARDED PATIENTS \$49,471  
 3851 FACILITATION OF COGNITIVE DEVELOPMENT AMONG CHILDREN WITH LEARNING  
 DEFICITS \$34,868  
 3900 INTERVENTION IN THE COGNITIVE DEVELOPMENT OF THE CULTURALLY  
 DEPRIVED AND FUNCTIONALLY RETARDED NEGRO PRESCHOOL CHILD \$31,488  
 3920 RELATIONSHIP BETWEEN THE TRAINING, EXPERIENCE AND SELECTED  
 PERSONALITY CHARACTERISTICS OF TEACHERS AND THE PROGRESS OF  
 TRAINABLE MENTALLY HANDICAPPED CHILDREN \$9,530  
 3990 THE EFFECT OF SPECIAL CLASS PLACEMENT ON THE SELF-CONCEPT OF  
 ABILITY OF THE EDUCABLE MENTALLY RETARDED CHILD \$9,008  
 4320 AN AREA-WIDE EDUCATIONAL VOCATIONAL PREPARATION AND PLACEMENT

PROGRAM FOR HIGH SCHOOL EDUCABLE MENTALLY RETARDED STUDENTS OF  
 MUSKEGON COUNTY, MICHIGAN: A TOTAL COMMUNITY APPROACH \$47,530  
 5655 DECISION CRITERIA IN ENDOGENOUS MENTALLY RETARDED ADULTS \$23,570  
 6370 COMPRENSIVE PROGRAMMING FOR THE SEVERELY RETARDED \$100,000  
 6480 HABIT TRAINING OF THE SEVERELY RETARDED \$100,000

#### MINNESOTA

0430 DEVELOPMENTAL NERVOUS DISORDERS: KRABBE'S DISEASE \$19,859  
 0440 DIRECT AND INDIRECT CALORIMETRY IN NEWBORNS \$21,986  
 0950 A CENTER FOR RESEARCH IN HUMAN LEARNING \$138,095  
 0970 AMINO ACID FLUX IN DEVELOPING BRAIN \$27,168  
 1760 INTESTINAL TRANSPORT OF AMINO ACIDS IN PKU \$31,675  
 2463 EMBRYOGENESIS OF THE ADRENERGIC NERVOUS SYSTEM \$22,190  
 2780 DERMATOGlyphICS IN MENTAL RETARDATION \$25,097  
 3340 THREE PROJECTS FOR HOSPITAL IMPROVEMENT \$52,879  
 4085 ASSESSING THE WORK PERSONALITIES OF MENTALLY RETARDED ADULTS \$41,417  
 4180 IMPROVEMENTS IN INDEPENDENT LIVING \$62,803  
 4210 INTENSIVE HABIT TRAINING OF SEVERELY RETARDED ADULTS \$99,761  
 4720 INTER-DISTRICT SCHOOL REHABILITATION PROGRAM FOR LESS ABLE  
 RETARDED ADOLESCENTS \$175,287  
 5095 METABOLISM OF COPPER AND CALCIUM IN WILSON'S DISEASE \$36,170  
 5150 PSYCHIATRIC TREATMENT PROGRAM FOR ADOLESCENTS \$74,421  
 5310 A COMPREHENSIVE CLINICAL AND LABORATORY STUDY OF MENTALLY RETARDED  
 AND NEUROLOGICALLY HANDICAPPED CHILDREN \$13,076  
 5980 LONGITUDINAL STUDY OF EEG PATTERNS IN CHILDREN \$13,963  
 6470 GROUP DAY CARE FOR THE RETARDED IN A RURAL COMMUNITY \$24,925

#### MISSISSIPPI

6440 ELLISVILLE STATE SCHOOL IMPROVEMENT PLAN \$98,000

MISSOURI

0348 BIOSYNTHESIS AND METABOLISM OF GALACTOLIPIDS \$28,680

0460 EFFECTS OF ANOXIA ON BRAIN METABOLISM IN THE NEWBORN \$29,050

0680 PHENYLALANINE ANTIMETABOLITE EFFECT ON NERVOUS SYSTEM \$26,698

2460 ELECTRON MICROSCOPY OF NUTRITIONAL ENCEPHALOPATHY \$23,553

3048 DIAGNOSTIC ASPECTS OF ELECTROENCEPHALIC AUDIOMETRY \$55,099

4040 TIME PERSPECTIVE CHANGE IN INSTITUTIONALIZED MENTAL RETARDATE  
UNDER CONDITIONS OF SOCIAL OR TOKEN REINFORCEMENT \$7,640

4700 INDUSTRIAL TRAINING RESOURCES IN REHABILITATION PROGRAMS FOR  
RETARDATE \$89,184

5370 A DIAGNOSTIC LABORATORY FOR MENTAL RETARDATION \$12,979

5650 DAY CARE CENTER DEMONSTRATION PROJECT FOR SEVERELY RETARDED CHILDREN  
\$32,498

5721 INTEGRATION OF EDUCABLE RETARDATE IN NORMAL GROUPS \$119,503

6530 INTENSIVE PROGRAM FOR SEVERELY AND PROFOUNDLY RETARDED \$100,000

MONTANA

6250 TO ESTABLISH A CLINIC IN MISSOULA, MONTANA FOR THE DIAGNOSIS AND  
THE EVALUATION OF THE RETARDED IN WESTERN MONTANA, AND PROVIDE A  
TRAINING GROUND FOR PROFESSIONAL PERSONS IN THE RETARDATION FIELD  
\$48,706

6260 TO ESTABLISH A REGIONAL INFORMATION-REFERRAL CENTER IN GREAT FALLS  
FOR HANDICAPPED CHILDREN TO DEMONSTRATE ITS FEASIBILITY IN SERVING  
A LARGE PREDOMINATELY RURAL AREA \$28,653

6420 DEVELOPMENT OF A COTTAGE UNIT TEAM PROGRAM \$97,300

#### NEBRASKA

0170 MENTAL RETARDATION CLINICAL RESEARCH CENTER \$414,386  
0490 ENZYME ACTIVITY IN BRAINS OF INFANT RATS \$17,099  
0583 MENTAL RETARDATION CONFERENCE ON PHYSICAL TRAUMA \$28,000  
0753 ROLE OF BRANCHED CHAIN AMINO ACIDS IN BRAIN MATURATION \$19,274  
1500 EFFECTS OF VIRUSES ON HUMAN CHROMOSOMES \$30,190  
4390 A WORK EXPERIENCE PROGRAM FOR THE MENTALLY RETARDED CHILD WHO HAS  
REACHED AGE SIXTEEN YEARS \$86,655  
5730 DEVELOPMENT OF BRAIN ELECTRICAL ACTIVITY OF INFANTS \$41,193

#### NEVADA

0710 PRE-NATAL AND POST-NATAL MONOAMINES IN BRAIN AND HEART \$11,762

#### NEW HAMPSHIRE

0870 VIRUS-CELL INTERACTION REPLICATION AND DIFFERENTIATION \$84,998  
2270 ULTRASTRUCTURAL STUDIES IN MAMMALIAN TERATOGENESIS \$27,400  
5240 THERAPEUTIC MILIEU FOR MENTAL RETARDATE \$67,661  
6020 NORTH COUNTRY CENTER FOR EXCEPTIONAL CHILDREN \$19,606  
6050 PERSONAL DEVELOPMENT AND DAY CARE CENTER \$9,086  
6240 THE NEW HOPE CENTER \$11,496

#### NEW JERSEY

2310 WORD ASSOCIATION NORMS -- ADOLESCENT RETARDATE \$22,682  
3270 CONCENTRATED DORMITORY SERVICES \$84,509  
4041 TRAINING PROGRAM FOR HIGH SCHOOL AND COLLEGE STUDENTS IN THERAPEUTIC  
RECREATION AND CAMPING \$3,900  
4230 PHYSICAL HABILITATION FOR THE SEVERELY RETARDED \$55,060  
5020 IMPROVED CARE FOR THE AGING RETARDATE \$38,162



5050 IMPROVEMENT OF LANGUAGE SKILLS IN RETARDED CHILDREN \$87,669  
 5080 MAXIMAL STIMULATION AND CARE FOR SEVERELY RETARDED \$42,844  
 5400 AN INDEPENDENT LIVING ORIENTED ACTIVITIES PROGRAM FOR THE  
 MENTALLY RETARDED \$97,361  
 5830 EVALUATION AND CONSULTATION SERVICE FOR MENTAL RETARDATION  
 IN THE UNION COUNTY AREA OF NORTHERN NEW JERSEY \$104,265  
 6650 SELF-HELP SKILLS TAUGHT THRU ART-MUSIC INNOVATIONS \$43,154

#### NEW MEXICO

4310 TRAINING NON-PROFESSIONAL COMMUNITY PROJECT LEADERS

#### NEW YORK

0080 EFFECT OF DIETARY PROTEIN ON PREMATURELY BORN INFANTS \$49,662  
 0090 EFFECT OF MALNUTRITION IN EARLY LIFE \$43,040  
 0155 IMMEDIATE AND LONG-TERM EFFECTS OF ASPHYXIA NEONATORUM \$132,750  
 0330 THE GROWTH OF COGNITIVE ABILITIES IN YOUNG CHILDREN \$3,543  
 0343 ATYPICAL HUMAN PLASMA CHOLINESTERASE \$20,736  
 0415 CONGENITAL CATARACTS AND ASSOCIATED ANOMALIES \$8,977  
 0510 FACTORS INFLUENCING NEURAL TUBE DIFFERENTIATION \$8,618  
 0520 FUNCTIONAL ANALYSIS OF THE HUMAN SKULL \$8,749  
 0523 GANGLIOSIDES IN WHITE MATTER AND IN MYELIN \$30,435  
 0560 INHIBITION ASSAY -- DETECTION AND STUDY OF INBORN ERRORS \$48,074  
 0700 PHYLOGENY AND ONTOGENY OF THE CEREBRAL CORTEX \$18,808  
 0720 PRODUCTION OF ABNORMAL MOVEMENTS OF NEUROLOGIC ORIGIN \$11,762  
 0770 STUDIES IN TAY-SACHS DISEASE \$16,030  
 0790 STUDY OF BRAIN GANGLIOSIDE STRUCTURES \$36,327  
 0813 STUDY OF HEREDITARY NEUROMUSCULAR DISEASES \$107,443  
 0840 THE ROLE OF THE THYROID GLAND IN BRAIN METABOLISM \$30,054

0935 WORKSHOP ON HEREDITARY NEUROMUSCULAR DISEASES \$20,000  
 0990 AMNIOTIC FLUID CONSTITUENTS IN FETAL ERYTHROBLASTOSIS \$32,176  
 1080 BIOCHEMICAL CAUSES OF MENTAL RETARDATION \$67,923  
 1320 CENTER FOR NORMAL AND ABERRANT ADAPTIVE DEVELOPMENT \$294,167  
 1330 CENTRAL NERVOUS SYSTEM SEQUELAE OF PREMATUREITY \$28,426  
 1350 CHEMICAL STUDY OF CONGENITAL MENTAL DEFECTS \$33,192  
 1430 DEVELOPMENT OF CONCEPTIONS OF PSYCHOLOGICAL CAUSALITY \$12,393  
 1475 EFFECT OF AMINO ACID LEVELS ON PROTEIN BIOSYNTHESIS \$31,290  
 1530 EVOKED EEG POTENTIALS AND DIET OF PREMATURE INFANTS \$77,604  
 1640 FUNCTIONAL ASPECTS OF PULMONARY IMMATUREITY \$25,932  
 1800 LOWER SES CHILD REARING AND COGNITIVE DIFFERENTIATION \$68,165  
 1870 METABOLISM OF DRUG SUBSTRATES BY HUMAN PLACENTA \$16,867  
 1960 PERINATAL VASCULAR CAUSES OF NEONATAL ATELECTASIS \$27,004  
 2220 THE INFANTS VOCALIZATIONS \$22,395  
 2280 ULTRASTRUCTURAL STUDIES OF THE LUNG \$28,975  
 2375 BRAIN BARRIER SYSTEM MECHANISMS FOR AMINO ACIDS \$35,445  
 2390 BRAIN FUNCTIONS IN METABOLIC DISORDERS \$54,258  
 2410 CORTICAL DENDRITES \$21,786  
 2415 CYTOLOGIC STUDIES IN DISEASES OF THE NERVOUS SYSTEM \$59,174  
 2420 EFFECT OF GROWTH ON BULK RNA AND A NEW RNA FRACTION \$11,180  
 2450 ELECTRON MICROSCOPY AND BIOCHEMISTRY OF LIPIDOSES \$24,513  
 2455 ELECTRON MICROSCOPY OF THE NERVOUS SYSTEM \$47,215  
 2470 ETIOLOGY AND CONSEQUENCES OF PERINATAL BRAIN DAMAGE \$95,265  
 2480 HISTOPATHOLOGIC PATTERNS IN THE BRAIN OF THE PERINATAL PERIOD \$27,409  
 2485 INTEGRATIVE APPROACHES TO NEUROBIOLOGICAL PROBLEMS \$102,117  
 2525 NEUROLOGICAL CLINICAL RESEARCH CENTER \$182,751  
 2580 STORAGE DISEASE -- INTRACELLULAR TRANSPORT AND DIGESTION \$34,505

2600 STUDIES OF TETRAPLOID DNA STATUS OF PURKINJE CELLS \$16,096  
 2613 STUDY OF NERVOUS SYSTEM LIPIDS \$47,537  
 2660 GALACTOSEMIA SCREENING OF NEWBORN IN THE COMMUNITY \$35,280  
 2710 CELLULAR ASPECTS OF HUMAN GENETICS AND IMMUNOLOGY \$159,792  
 2742 CNS PLASTICITY DURING CRITICAL PERIODS OF DEVELOPMENT \$238,202  
 2770 CYTOLOGICAL AND BIOCHEMICAL STUDIES IN HUMAN GENETICS \$60,784  
 2960 BEHAVIORAL STUDY OF MENTALLY RETARDED CHILDREN \$38,207  
 3070 RETARDATION IN INTELLECTUAL DEVELOPMENT OF LOWER-CLASS PUERTO RICAN  
 CHILDREN IN NEW YORK CITY \$21,855  
 3140 DIAGNOSTIC-THERAPEUTIC STUDIES OF HIGH-RISK PREGNANCY \$133,986  
 3160 PREVENTION OF HEMOLYTIC DISEASE OF THE NEWBORN \$13,803  
 3320 RESIDENTIAL UNIT CARE \$93,549  
 3380 EARLY INTELLECTIVE TRAINING AND SCHOOL PERFORMANCE \$203,877  
 3390 MATERNAL CONTACT AND PREMATURE INFANT DEVELOPMENT \$113,694  
 3410 A PLAN TO AID DEVELOPMENT IN DEPENDENT CHILDREN \$64,413  
 3460 EDUCATION PROGRAM EXTENSION FOR MODERATELY RETARDED \$56,140  
 3640 TODDLER TRAINING AND STIMULATION \$99,655  
 3690 A CURRICULUM CENTER IN SOCIAL LEARNING FOR SPECIAL CLASS PROGRAMS  
 FOR THE EDUCABLE MENTALLY RETARDED \$199,470  
 3710 A DEMONSTRATION-RESEARCH PROJECT IN CURRICULUM AND METHODS OF  
 INSTRUCTION FOR ELEMENTARY LEVEL EDUCABLE MENTALLY RETARDED CHILDREN  
 \$15,338  
 3810 COMPARISON OF SUCCESSIVE DISCRIMINATION REVERSAL PERFORMANCE ACROSS  
 DIFFERENT LEVELS OF MENTAL RETARDATION \$8,653  
 3820 CURIOSITY BEHAVIOR IN EDUCABLE MENTALLY RETARDED ADOLESCENTS:  
 CHARACTERISTICS, MODIFIABILITY, AND CONSEQUENCES OF TRAINING  
 \$27,403

3832 DEVELOPMENT AND EVALUATION OF AUTOINSTRUCTIONAL PROGRAM IN ARITHMETIC  
FOR THE EDUCABLE MENTALLY HANDICAPPED \$24,415

4001 THE RELATIONSHIP AMONG VARIOUS DICHOTOMOUS DESCRIPTIVE PERSONALITY SCAL  
AND ACHIEVEMENT IN THE MENTALLY RETARDED \$38,714

4190 INTENSIVE HABILITATION AND MOTIVATION PROGRAM \$99,950

4260 PROMOTING COMMUNITY LIVING WITH RECREATION ACTIVITIES \$63,360

4330 THE APPLICATION FOR EMPLOYMENT AND FOR SEEKING SUCCESS AMONG  
EDUCABLE MENTALLY RETARDED YOUTH \$4,488

4332 COGNITIVE DEVELOPMENT IN CHILDREN WITH BRAIN DAMAGE \$57,293

4730 INTER-GENERATIONAL RELATIONSHIP - IN THE VOCATIONAL REHABILITATION  
OF MENTALLY RETARDED \$91,911

4855 SKILL ANALYSIS FOR PREDICTING VOCATIONAL SUCCESS OF THE MENTALLY RETARD  
\$43,435

4930 A HOME TRAINING PROGRAM FOR MENTALLY ILL CHILDREN \$53,200

4940 A MENTAL HEALTH CENTER FOR DISTURBED BLIND CHILDREN \$84,844

4970 CHILDREN'S PSYCHOPHARMACOLOGY UNIT \$96,523

5100 MODE OF ACTION OF CONVULSIVE AGENTS \$18,306

5230 THE EFFECT OF PLASMIN IN HYALINE MEMBRANE DISEASE \$12,481

5380 AIDING COGNITIVE GROWTH IN DISADVANTAGED PRESCHOOLERS \$66,306

5710 DEVELOPMENT OF A DEMONSTRATION DAY CARE CENTER FOR YOUNG CHILDREN  
\$259,368

5800 ENHANCEMENT OF RECREATION SERVICE TO DISABLED CHILDREN \$49,312

5801 EMPLOYMENT OF THE MENTALLY RETARDED IN COMPETITIVE INDUSTRY - A FILM  
\$7,516

5900 FETAL LIFE STUDY -- THE ROLE OF PRENATAL INFLUENCES \$59,600

6040 PARENT EDUCATION IN CHILD REARING PRACTICES FOR MENTALLY RETARDED  
\$47,111

6120 RESEARCH IN MENTAL RETARDATION AND HUMAN DEVELOPMENT \$68,570  
 6130 SATELLITE DAY CENTERS FOR RETARDED ADULTS \$88,550  
 6200 THE CHILD AND THE STATE \$107,673  
 6380 COORDINATION OF NYC MENTAL RETARDATION PROGRAMS \$47,587

#### NORTH CAROLINA

0010 ABO ERYTHROBLASTOSIS-IMMUNOLOGIC STUDIES \$28,194  
 0610 MUCOPOLYSACCHARIDES IN NEUROLOGICAL DISORDERS \$19,959  
 0850 THREE PROBLEMS IN EXPERIMENTAL PATHOLOGY \$43,934  
 1730 INITIATION AND CONTROL OF RESPIRATION OF TERM LAMBS \$30,136  
 2290 URINARY TAURINE AND SERUM URIC ACID IN MONGOLISM \$15,490  
 2380 BRAIN FUNCTION AND THE METABOLISM OF MACROMOLECULES \$43,588  
 2895 THE ATTENTIONAL RESPONSE OF THE INFANT TO DISCREPANCY \$26,227  
 3560 PROGRAMMED REHABILITATION OF SEVERELY RETARDED CHILDREN \$44,934  
 3800 COGNITIVE TRAINING WITH RETARDED CHILDREN - III \$133,136  
 4300 THE REHABILITATION OF DELINQUENT RETARDES \$53,049  
 5340 A DEMONSTRATION AND RESEARCH PROGRAM IN HEALTH NEEDS AND HEALTH CARE  
 OF CHILDREN IN DAY CARE \$145,983  
 5590 COMPREHENSIVE DAY CARE PROGRAM FOR THE MENTALLY RETARDED \$52,888  
 6000 MITIGATION OF MENTAL RETARDATION THROUGH EARLY CARE AND MANAGEMENT  
 OF CEREBRAL PALSID INFANTS - A DEMONSTRATION PROGRAM \$35,673  
 6125 UNC CHILD DEVELOPMENT AND MENTAL RETARDATION INSTITUTE \$144,148  
 6160 SHORT TERM ADMISSION PROGRAM \$7,538  
 6190 SUPPLEMENTAL DAYTIME CARE OF INFANTS \$147,130  
 6280 TRANSITION-BUFFER UNIT FOR MENTALLY RETARDED \$21,472

#### OHIO

0255 TERATOLOGICAL STUDIES WITH INBRED MICE \$24,114

0380 BRAIN PROTEIN SYNTHESIS IN RELATION TO MENTAL RETARDATION \$50,169  
 0500 EXPERIMENTAL MODEL OF PHENYLKETONURIA-LIKE CONDITIONS \$30,293  
 1210 BIOCHEMICAL DEFECTS RELATED TO CONGENITAL ANOMALIES \$31,325  
 1370 CONGENITAL MALFORMATIONS IN MAMMALS \$79,511  
 1840 METABOLIC DISORDERS AND MENTAL DEFICIENCY \$61,114  
 1970 PERSISTENCE OF STRESS EFFECTS AS A FUNCTION OF AGE \$12,235  
 1990 PHENYLALANINE METABOLISM IN PHENYLKETONURIA \$18,927  
 2240 TISSUE HEPARIN LEVELS IN FETUS AND NEWBORN \$1,854  
 2900 THE CYTOGENETICS OF EMBRYONIC MALDEVELOPMENT \$44,847  
 4325 READING-FREE VOCATIONAL INTEREST INVENTORY \$34,010  
 4400 A WORK EXPERIENCE PROGRAM FOR THE MENTALLY RETARDED IN THEIR LAST  
 YEAR OF SCHOOL \$62,982  
 4690 GREATER CLEVELAND MENTAL RETARDATION DEVELOPMENT PROJECT \$42,194  
 4990 DEMONSTRATING ADAPTIVE BEHAVIOR-PSYCHIATRIC PROBLEM \$88,985  
 5500 CLINICAL AND LABORATORY STUDIES ON RUBELLA \$43,720  
 5850 EVALUATION OF NUTRITIONAL STATUS OF PRE-SCHOOL CHILDREN IN THE  
 UNITED STATES \$485,499  
 5950 INTENSIFICATION OF RESEARCH IN MENTAL RETARDATION \$189,186  
 6270 TRAINING AND RESEARCH FACILITY IN CHILD WELFARE \$224,523  
 6290 TRI-STATE COMPREHENSIVE PLANNING AND IMPLEMENTATION FOR MENTAL  
 RETARDATION \$34,821  
 6430 DEVELOPMENT OF SELF-HELP SOCIAL SKILLS IN INSTITUTIONALIZED  
 SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS \$91,087

#### OKLAHOMA

3046 DEFICITS IN BRAIN DAMAGE \$45,176  
 3980 THE DEVELOPMENT OF THE SOCIAL CONCEPT "GROUP" AMONG MENTALLY

RETARDED CHILDREN \$5,000

5070 IMPROVEMENT OF SERVICE FOR BEDRIDDEN RETARDED \$99,451

6690 TEACHING BASIC SKILLS TO THE SEVERELY RETARDED \$99,813

#### OREGON

1770 INVESTIGATION OF THE PEPTIDES IN HUMAN SERUM AND URINE \$22,133

2440 ELECTROENCEPHALOGRAPHIC STUDIES IN NEWBORN AND YOUNG INFANTS \$32,100

2520 NEURAL MECHANISMS OF LEARNING AND BEHAVIOR IN APLYSIA \$17,963

3580 PROGRAMMING TO IMPROVE SOCIAL SKILLS OF RETARDATEES \$98,023

3872 GOAL SETTING BEHAVIOR AS AN INDEPENDENT VARIABLE RELATED TO THE  
PERFORMANCE OF EDUCABLE MENTALLY RETARDED ADOLESCENTS ON TWO EDUCATIONAL  
TASKS \$10,000

4090 AN INSTITUTION PROGRAM FOR THE DEFECTIVE DELINQUENT \$11,037

4580 COORDINATED PROGRAM OF VOCATIONAL REHABILITATION AND SPECIAL  
EDUCATION SERVICES FOR THE MENTALLY RETARDED \$84,569

4845 PATTERNING AND TEACHING MONGOLOIDS FINE COORDINATION \$14,712

#### PENNSYLVANIA

1450 DEVELOPMENT OF LIVER ENZYMES \$18,317

1490 EFFECTS OF RNA AND DNA ON EMBRYONIC CEPHALIC TERATA \$36,620

1700 HYPOXEMIA, ACIDEMIA AND CAPILLARY PERMEABILITY \$21,847

1845 METABOLIC DISORDERS IN CHILDREN \$52,348

2040 PLACENTAL EXCHANGE, PARTICULARLY WITH O<sub>2</sub> AND CO \$18,310

2140 STEROID METABOLISM DURING GROWTH AND MATURATION \$56,291

2373 BIOMEDICAL CENTER FOR CLINICAL NEUROLOGICAL DISORDERS \$23,790

2430 EFFECTS OF ACUTE BILIRUBIN INTOXICATION ON THE CNS \$27,898

2610 STUDY OF BRAIN HISTOLOGY IN THE PERINATAL PERIOD \$6,002

2640 VITAMIN B<sub>6</sub> AND CENTRAL NERVOUS SYSTEM FUNCTION \$36,382

2810 HUMAN CHROMOSOMAL ANEUPLOIDY \$50,610  
 2830 LAB INDICIES OF HUMAN FETOPLACENTAL FUNCTION \$20,815  
 2940 ANALYTIC STUDIES OF VISUAL PERCEPTION \$24,099  
 3035 CEREBRAL CORTICAL BIOPSIES \$19,707  
 3110 REASONING, MORAL JUDGMENT, AND MORAL CONDUCT OF RETARDATE \$113,662  
 3230 STUDIES OF HISTIDINEMIA AND OTHER METABOLIC DISORDERS \$16,665  
 3836 EFFECTS OF A STRUCTURED PROGRAM OF PERCEPTUAL-MOTOR TRAINING ON THE  
 DEVELOPMENT AND SCHOOL ACHIEVEMENT OF EDUCABLE MENTALLY RETARDED CHILDREN  
 \$10,000  
 3870 FACTORS IN THE EFFECTIVENESS OF ARTICULATION THERAPY WITH EDUCABLE  
 RETARDED CHILDREN \$31,485  
 3871 FACTORS RELATED TO SPEECH HEARING BY MENTALLY RETARDED CHILDREN  
 \$74,421  
 3912 PREDICTORS OF ACHIEVEMENT FOR EDUCABLE MENTALLY RETARDED CHILDREN  
 \$8,784  
 4920 ALBUMIN BINDING CAPACITY AND KERNICTERUS \$36,299  
 5060 IMPROVEMENT OF PSYCHO-SENSORY HABILITATION SERVICES \$70,544  
 5160 PSYCHO-SOCIAL TREATMENT UNIT \$90,000  
 6490 IMPROVING SELF-CONCEPT IN UNDIFFERENTIATED RETARDS \$91,702

#### RHODE ISLAND

1790 LEARNING AND TRANSFER IN DISCRIMINATIONS BY RETARDATE \$4,761  
 1915 ONTOGENY OF VISUAL AND AUDITORY EXPLORATION IN INFANTS \$47,101  
 2475 GANGLIOSIDE INDUCTION DURING EMBRYONIC DEVELOPMENT \$15,151  
 2820 HUMAN NEONATAL EEG CORRELATES OF NEUROMORPHOLOGY \$14,205  
 2850 NEONATAL ASSESSMENTS AND FOLLOW-UP VALIDATIONS \$22,216  
 4875 TRAINING OF PROGRAM SUPERVISORS OF MENTALLY RETARDED WORKERS \$41,417



6140 SENSORY DISCRIMINATION AND LEARNING IN INFANTS \$40,200

SOUTH CAROLINA

2980 COMPREHENSIVE EVALUATION OF MENTALLY RETARDED \$88,709

5690 DEVELOPING A MASTER PLAN FOR COMPREHENSIVE COMMUNITY SERVICES  
FOR THE MENTALLY RETARDED \$42,590

SOUTH DAKOTA

6590 POTENTIALS DEVELOPMENT FOR INDEPENDENT LIVING \$100,000

TENNESSEE

0320 SOCIAL-CULTURAL ASPECTS OF MENTAL RETARDATION \$2,549

0420 CYSTATHIONINE METABOLISM IN BRAIN \$10,883

2090 RESEARCH PROGRAM ON RETARDED INTELLECTUAL DEVELOPMENT \$246,779

3530 PERSONALITY AND LEARNING IN RETARDED CHILDREN \$28,863

3570 PROGRAMMING FOR THE HIGHER FUNCTIONING RETARDATE \$89,402

3780 A STUDY OF THE EFFECTS OF THREE EXPERIMENTAL CURRICULUM UNITS ON  
THE SOCIAL PERCEPTION AND PRE-VOCATIONAL READINESS OF EDUCABLE  
MENTALLY RETARDED ADOLESCENT \$5,445

3840 EFFICACY OF SEVERAL APPROACHES FOR TEACHING READING TO THE  
EDUCABLE MENTALLY RETARDED \$18,163

3940 SENSORY-PERCEPTUAL LANGUAGE TRAINING TO PREVENT SCHOOL LEARNING  
DISABILITIES IN CULTURALLY DEPRIVED PRESCHOOL CHILDREN \$65,582

4020 THE USE OF PROGRAMMED LANGUAGE TRAINING AS A MEANS FOR DIFFERENTIAL  
DIAGNOSIS AND EDUCATIONAL REMEDIATION AMONG SEVERELY RETARDED  
CHILDREN \$41,131

5420 A PROPOSED PROJECT TO DEMONSTRATE THE EFFECTIVENESS OF AN  
ENVIRONMENTAL STIMULATION SERVICE PROGRAM WITH SEVERELY AND

PROFOUNDLY RETARDED, NON-AMBULATORY RESIDENTS AT CLOVER BOTTOM  
HOSPITAL AND SCHOOL \$8,300

5570 COMMUNITY DAY CARE PROGRAM \$138,522  
5770 DIAGNOSTIC AND DEMONSTRATION CLINIC IN MENTAL RETARDATION \$97,965  
5930 IMPLEMENTATION GRANT, KENNEDY CENTER, PEABODY \$61,700  
6540 INTENSIVE TRAINING IN BASIC SELF-CARE AND SOCIAL SKILLS \$100,000

TEXAS

1240 BIOCHEMICAL EFFECTS OF HUMAN CHROMOSOMAL ABERRATIONS \$21,833  
1560 EXPERIMENTAL PHENYLKETONURIA IN INFANT RATS \$24,232  
1595 FETAL AND NEONATAL PITUITARY-THYROID PHYSIOLOGY \$26,965  
2355 BILIRUBIN METABOLISM IN NEONATAL LIVER AND BRAIN \$29,239  
2370 BIOCHEMISTRY OF SPHINGOSINE AND SPHINGOLIPIDS \$14,451  
3000 INKBLOT PERCEPTION AND PERSONALITY \$46,461  
3150 ASYMPTOMATIC BACTERIURIA IN PREGNANCY \$30,726  
3260 CHILD DEVELOPMENT AND TRAINING SERVICES \$100,000  
3290 INTENSIVE SOCIALIZATION PROGRAM FOR MILDLY RETARDED \$100,000  
3450 DEVELOPMENT OF CHILD CARE SERVICES \$77,660  
3680 USE OF VOLUNTEERS AS TRAINERS OF RETARDED CHILDREN \$25,617  
3731 AN INVESTIGATION OF FACTORS INFLUENCING LEARNING IN THE MENTALLY RETARD  
AND THEIR USE IN THE DESIGN OF INSTRUCTIONAL MATERIALS \$35,459  
4810 OCCUPATIONAL TRAINING CENTER FOR THE MENTALLY RETARDED \$76,730  
5130 PHYSICAL DEVELOPMENT PROGRAM FOR MENTALLY RETARDED \$40,113  
5180 SOCIAL DEVELOPMENT PROGRAM FOR MENTAL RETARDATE \$50,841  
5290 A COMMUNITY APPROACH IN THE MANAGEMENT OF DENTAL DISEASE AMONG  
THE MENTALLY RETARDED \$50,167  
5320 A COOPERATIVE REGIONAL APPROACH TO DAY-CARE PROGRAMS \$55,251

5700 DEVELOPMENTAL-RECREATION PROGRAM FOR MENTAL RETARDATEES \$79,935  
 5720 DEVELOPMENT OF A RESIDENT TRAINING SERVICE \$91,419  
 5805 ENVIRONMENTAL CRITERIA: MR DAY CARE FACILITIES \$97,463  
 6210 THE DEVELOPMENT AND IMPLEMENTATION OF AN INFORMATION-EDUCATION AND  
 REFERRAL SERVICE SYSTEM FOR THE STATE OF TEXAS PROGRAM IN  
 MENTAL RETARDATION \$11,473  
 6230 THE IMPROVEMENT AND EXPANSION OF DIAGNOSTIC, EVALUATIVE AND  
 PREVENTIVE SERVICES FOR MENTALLY RETARDED CHILDREN \$78,040  
 6500 INFORMATION, COUNSELING & REFERRAL SERVICE FOR MENTALLY RETARDED  
 \$18,392  
 6610 RESIDENT TRAINING PROJECT \$6,507

#### UTAH

3951 SUMMER TRAINING WORK EXPERIENCE IN RECREATION \$9,291  
 6520 INTENSIVE HABIT-TRAINING CENTER \$91,584

#### VERMONT

1570 FACTORS INFLUENCING EXPERIMENTAL KERNICTERUS \$25,618  
 1820 METABOLIC ABNORMALITIES IN MENTAL RETARDATION \$39,254  
 3782 BENNINGTON COUNTY DAY PROGRAM FOR PRE-SCHOOL MENTALLY RETARDED CHILDREN  
 \$36,556  
 4290 TERMINAL EMPLOYMENT IN A RESIDENTIAL SHELTERED WORKSHOP \$11,534  
 5140 PHYSICAL THERAPY AND RECREATIONAL THERAPY IMPROVEMENT \$48,086  
 6720 VOLUNTEER SERVICES PROJECT \$19,446

#### VIRGINIA

0580 MALFORMATIONS OF THE NERVOUS SYSTEM \$32,939  
 1860 METABOLIC STUDIES IN MONGOLISM \$47,777

1890 NEWBORN SERUM PROTEIN AND IMMUNOLOGICAL ABNORMALITIES \$572  
 2495 MICROCHEMICAL PATHOLOGY OF CEREBRAL CORTEX MATURATION \$48,780  
 4140 HIP: PRE-VOCATIONAL TRAINING \$35,176  
 4150 HIP: RECREATIONAL DEPARTMENT \$42,789  
 5350 A DEMONSTRATION DAYTIME DEVELOPMENT CENTER PROJECT FOR A SUBURBAN  
 COMMUNITY \$68,044

#### WASHINGTON

1280 BIOSYNTHESIS OF PULMONARY SURFACE ACTIVE LIPIDS \$26,445  
 1400 DELAY OF REINFORCEMENT AND CHILDREN'S BEHAVIOR \$18,980  
 1710 HYPOXIA, METABOLISM, AND NEONATAL THERMOREGULATION \$14,962  
 1815 MECHANISM OF BILIRUBIN TOXICITY \$22,700  
 1875 NEONATAL CLINICAL RESEARCH FACILITY \$103,450  
 2020 PHYSIOLOGIC STUDIES IN NEWLY BORN HUMAN INFANTS \$26,328  
 3280 DEVELOPMENTAL TRAINING FOR THE SEVERELY RETARDED \$87,373  
 6110 RESEARCH IN MENTAL RETARDATION AND CHILD DEVELOPMENT \$61,877  
 6340 AN OPERANT CONDITIONING EDUCATION AND TRAINING UNIT \$94,846  
 6450 EVALUATION AND PLANNING TEAM \$100,000  
 6580 MENTAL RETARDATION SERVICE FOR TACOMA-PIERCE COUNTY AREA \$45,160

#### WEST VIRGINIA

5260 UP-GRADING OF GENERAL CARE FOR THE SEVERELY RETARDED \$38,051

#### WISCONSIN

1060 BIOCHEMICAL AND ANIMAL STUDIES IN MENTAL RETARDATION \$134,985  
 1470 EEG AUDIOMETRICS IN THE SEVERELY RETARDED \$18,416  
 1880 NEURO-CHEMICAL CHANGES WITH EXCESS AMINO ACIDS \$45,819  
 2285 UPTAKE OF AMINO ACIDS BY THE FETUS OF THE EWE \$27,329

3155 COMPARISON OF ISOTOPIC AND HEMAGGLUTINATION METHODS \$23,413  
 3430 CLASSICAL CONDITIONING IN RETARDATEES AND NORMALS \$16,740  
 3790 CLASS SIZE AND TEACHER AIDES AS FACTORS IN THE ACHIEVEMENT OF THE  
 EDUCABLE MENTALLY RETARDED \$53,952  
 3911 MATHEMATICS CURRICULUM INOVATION AND EDUCATION FOR EDUCABLY MENTALLY  
 RETARDED \$20,000  
 4370 A STRUCTURED COMMUNITY APPROACH TO COMPLETE SERVICES FOR THE RETARDED  
 \$200,000  
 4950 AN ENRICHMENT PROGRAM TO REDUCE PHYSICAL RESTRAINT \$94,585  
 5210 TEAM MANAGEMENT OF THE AMBULANT SEVERELY RETARDED \$100,000  
 5300 A COMMUNITY SERVICE DEMONSTRATION PROJECT FOR THE MENTALLY  
 RETARDED IN A RURAL AREA \$60,550  
 5495 A PROGRAM OF CENTER RESEARCH \$130,965  
 6330 AN ENRICHMENT PROGRAM TO DEVELOP SELF-HELP SKILLS \$106,679

#### WYOMING

3723 A SUMMER IN-SERVICE TRAINING PROJECT \$5,625  
 5610 COORDINATOR OF SERVICES FOR THE MENTALLY RETARDED IN NATRONA COUNTY  
 \$14,718  
 6660 SENSORY STIMULATION IN TRAINING THE PROFOUNDLY RETARDED \$77,159

#### GREECE

0385 CHROMOSOMAL ABNORMALITIES AND LOCALIZATION OF GENES \$17,850