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ANNUAL REPORT
OF
PROGRAM ACTIVITIES
NATIONAL INSTITUTE OF DENTAL RESEARCH
FISCAL YEAR 1979
PART V

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service National Institutes of Health

PART V

United States

NATIONAL INSTITUTE OF DENTAL RESEARCH

ANNUAL REPORT

of program activities.

COLLABORATIVE RESEARCH PROJECTS

October 1, 1978 - September 30, 1979

This document was prepared for administrative use at NIH. The comments and declarations of its contributors are their own and do not necessarily represent an official statement of the Institute.

Compiled By

Dental Research Data Officer

National Institute of Dental Research

National Institutes of Health

Bethesda, Maryland

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IDENTIFICATION NUMBER..... N01 DE42434-05
ORGANIZATION..... HAZLETON LABORATORIES
ADDRESS..... VIENNA VIRGINIA
INITIAL START DATE..... 05-01-74
EXPIRATION DATE..... 06-30-80
ORGANIZATION CODE..... 9640802
PROJECT DIRECTOR..... DALGARD, DAN W
NIDR PROJECT OFFICER..... BOWEN, WILLIAM H
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: ANTI-CARIES IMMUNIZATION IN SUBHUMAN PRIMATES

OBJECTIVES AND WORK SCOPE :

The Contractor will provide 40-50 *Macaca fascicularis* monkeys approximately sixteen months of age. The Contractor would house and maintain the monkeys with suitable sterility and safety procedures for a period of not less than two years. The monkeys would be fed eight times daily and less frequently on weekends with a special caries-conducive diet which would be specified by NIDR. The Contractor would also provide facilities for clinical (general anesthesia and minor oral surgery) and radiographic examinations.

IDENTIFICATION NUMBER..... N01 DE42435-06
ORGANIZATION..... SOUTHERN RESEARCH INSTITUTE
ADDRESS..... BIRMINGHAM ALABAMA
INITIAL START DATE..... 05-15-74
EXPIRATION DATE..... 05-31-79
ORGANIZATION CODE..... 7657001
PROJECT DIRECTOR..... COWSAR, DONALD R
NIDR PROJECT OFFICER..... REESE, JOYCE A.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: IMPROVED MATERIALS FOR MAXILLOFACIAL PROSTHESIS

OBJECTIVES AND WORK SCOPE :

Complete developmental phase by determining stain resistance, wettability, cleanability, dimensional stability, opacity, and adhesion to tape and surgical adhesive; optimizing bulk viscosity, pot life, vulcanization time and temperature, mold release and shrinkage, and intrinsic and extrinsic coloration techniques; evaluating special techniques for fabricating hollow, foam-filled, or microballon-filled prostheses. Conduct pre-clinical phase by formulation of larger batches, determination of storage stability, and evaluation with animals of the dermal and ocular toxicity of the components of kits and the cured silphenylene elastomers. Conduct clinical phase by fabrication of custom prostheses for patients and follow-up by inspection, interview, and examination of patients & questionnaire of patient acceptance, wear characteristics, and shortcoming of the silphenylene prostheses.

IDENTIFICATION NUMBER.....	N01 DE42438-05
ORGANIZATION.....	FORSYTH DENTAL CENTER
ADDRESS.....	BOSTON MASSACHUSETTS
INITIAL START DATE.....	07-01-74
EXPIRATION DATE.....	12-31-78
ORGANIZATION CODE.....	2705601
PROJECT DIRECTOR.....	TAUBMAN, MARTIN A
NIDR PROJECT OFFICER.....	IKARI, NORMAN S
NIDR CONTRACT SPECIALIST.....	MULLEN, EDITH
TITLE: IMMUNIZATION W/S MUTANS	ENZYMATIC ANTIGEN OF DENTAL CARIES
IN RODENTS	

OBJECTIVES AND WORK SCOPE :

The primary objective of this proposed research is to determine if immunization of rats with certain enzymes, from cariogenic bacteria, presented in a fashion to give rise to salivary IgA antibody, will result in effects on experimentally induced dental caries. The approach is to prepare crude enzyme antigens (CEA) from streptococci which have been shown to be cariogenic and to inject these antigens into the oral tissues of rats. After salivary and serum antibody response challenge is instituted with viable cariogenic S. mutans, the dental caries scores are determined and compared in immunized and control animals. Saliva and serum are examined for enzyme-inhibitory capacity of antibody, and oral tissues are examined for tissue antibody response as determined by fluorescent antibody techniques. A total of three experiments have been completed in conventional and gnotobiotic rats. In each of these experiments, animals immunized with CEA demonstrated lower dental caries scores and carious lesions than comparable sham-immunized animals.

IDENTIFICATION NUMBER..... NO1 DE42442-05
ORGANIZATION..... WASHINGTON, UNIVERSITY OF
ADDRESS..... SEATTLE WASHINGTON
INITIAL START DATE..... 07-01-74
EXPIRATION DATE..... 03-31-80
ORGANIZATION CODE..... 9087701
PROJECT DIRECTOR..... ALVARES, OLAV
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: DETERMINATION ROLE NUTRITION EPITHELIUM ORAL MUCOUS

OBJECTIVES AND WORK SCOPE :

The objective of this research is to determine the influence of protein, calorie, and vitamin deficiencies on oral mucous membranes in experimental animal model systems. Comparisons will be made between undernourished animals and those maintained on normal diets to determine the separate effects of chronic, progressive protein, calorie and vitamin deficiency on the health of the oral tissues. Tests conducted determine (1) cell turnover rates, (2) level of keratinization in keratinizing epithelium, (3) degree of alteration of metabolic processes (enzyme systems or protein synthesis), and (4) studies of basement membranes of the various epithelial linings.

IDENTIFICATION NUMBER..... N01 DE42444-04
ORGANIZATION..... OREGON, UNIVERSITY OF
ADDRESS..... PORTLAND OREGON
INITIAL START DATE..... 06-28-74
EXPIRATION DATE..... 07-15-79
ORGANIZATION CODE..... 6297007
PROJECT DIRECTOR..... LU, KUO H
NIDR PROJECT OFFICER..... BRUNELLE, JANET
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: EFFECT OF SPECIFIC METHODS OF FLUORIDES ADMIN ON CONTROLLING
CARIES

OBJECTIVES AND WORK SCOPE :

This is a clinical trial designed to determine whether high-level, short-term application of fluoride is more efficacious than a low-level, long-term method. A comparison will be made between five-minute applications of acidulated phosphate fluoride gel (1.23% F) in custom-fitted trays for 10 consecutive school days under dental hygienist supervision and a one-minute use of fluoride mouthrinse (1.023% F) each school day for the duration of two school years. The comparative effectiveness of these two modes of application would be determined by the dental caries experience of study subjects.

IDENTIFICATION NUMBER..... N01 DE42446-06
ORGANIZATION..... SOUTHERN RESEARCH INSTITUTE
ADDRESS..... BIRMINGHAM ALABAMA
INITIAL START DATE..... 06-28-74
EXPIRATION DATE..... 12-31-79
ORGANIZATION CODE..... 7657001
PROJECT DIRECTOR..... COWSAR, DONALD R
NIDR PROJECT OFFICER..... MIRTH, DALE B
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: FLUORIDES RELEASING SYSTEM FOR PROLONGED ORAL USE

OBJECTIVES AND WORK SCOPE :

The objective of this research project is to develop a fluoride-containing material that: will release fluoride at a constant predetermined linear rate for a period of at least six months without maintenance or adjustment; can be easily applied or attached in the mouth (attachment to a tooth or teeth by adhesive or orthodontic bands, or as part of a space maintainer, or a simple adhesive coating); can be completely and safely removed at any time; and should contain materials that exhibit a very low order of toxicity in animals, are harmless to the teeth and harmless to and non-absorbable through the oral and gastrointestinal mucoas.

IDENTIFICATION NUMBER..... N01 DE52449-06
ORGANIZATION..... CONNECTICUT, UNIVERSITY OF, HLTH. C
ADDRESS..... FARMINGTON CONNECTICUT
INITIAL START DATE..... 04-01-75
EXPIRATION DATE..... 06-30-80
ORGANIZATION CODE..... 1860150
PROJECT DIRECTOR..... DOHERTY, NEVILLE
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: CLINICAL FIELD TRIAL TO ASSESS COST EFFECT OF CARIES PREVENT
AGENTS

OBJECTIVES AND WORK SCOPE :

Conduct a clinical field trial consisting of one control and seven treatment groups wherein the cost and clinical effectiveness of each of the following agents and procedures shall be assessed singly and in combination: Supervised topical fluoride applications; applications of bis-GMA pit and fissure sealants; and supervised mouthrinsing program with a fluoride solution.

IDENTIFICATION NUMBER..... N01 DE52452-05
ORGANIZATION..... EMORY UNIVERSITY
ADDRESS..... ATLANTA GEORGIA
INITIAL START DATE..... 05-21-75
EXPIRATION DATE..... 05-20-80
ORGANIZATION CODE..... 2384501
PROJECT DIRECTOR..... MC CLURE, HAROLD M
NIDR PROJECT OFFICER..... PRATT, ROBERT M. JR.
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: INDUCTION ORAL FACIAL MALFORMATIONS IN M RHESUS MONKEY

OBJECTIVES AND WORK SCOPE :

The Contractor will conduct investigations pertaining to experimental induction of oral facial malformations in fetal rhesus monkeys; documentation of metabolism of administered drugs in pregnant animals and their detuses; and chromosomal evaluation of pregnant animals and products of conception, following drug administration. He will establish a breeding colony of rhesus monkeys sufficient to provide 15 pregnancies; establish the menstrual cycles of the females and conduct a breeding program to insure a minimum of 15 timed pregnancies; administer specified compounds to the pregnant animals at various stages of gestation; and monitor effects of drug administration in both pregnant animals and their progeny.

IDENTIFICATION NUMBER..... NO1 DE52454-05
ORGANIZATION..... TEXAS HEALTH SCI. CENTER, UNIVERSIT
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 06-27-75
EXPIRATION DATE..... 06-26-79
ORGANIZATION CODE..... 0578417
PROJECT DIRECTOR..... LEVY, BARNET M
NIDR PROJECT OFFICER..... KAKEHASHI, SAMUEL
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: STUDY PERIO DISEASE IN PATIENTS WITH ABNORMALITIES IN IMMUNE
SYSTEM

OBJECTIVES AND WORK SCOPE :

The contractor proposes to study a minimum of 25 patients with known deficiencies of the immune system and their state of periodontal health shall be documented to determine if there is any correlation between these two phenomena. The contractor will characterize in detail the immune deficiencies through assay of cellular immune response, as well as inflammatory response, and to characterize the clinical periodontal disease entity according to currently acceptable periodontal disease indices.

IDENTIFICATION NUMBER..... N01 DE52455-05
ORGANIZATION..... OREGON, UNIVERSITY OF
ADDRESS..... PORTLAND OREGON
INITIAL START DATE..... 06-27-75
EXPIRATION DATE..... 06-26-79
ORGANIZATION CODE..... 6297007
PROJECT DIRECTOR..... DALGARD, DAN W
NIDR PROJECT OFFICER..... KAKEHASHI, SAMUEL
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: STUDY OF PERIO DISEASE ON PATIENTS WITH ABNORMALITIES OF THE
SYSTEM

OBJECTIVES AND WORK SCOPE :

The contractor proposes to study a minimum of 25 patients with known deficiencies of the immune system and their state of periodontal health shall be documented to determine if there is any correlation between these two phenomena. The contractor will characterize in detail the immune deficiencies through assay of cellular immune response, as well as inflammatory response, and to characterize the clinical periodontal disease entity according to currently acceptable periodontal disease indices.

IDENTIFICATION NUMBER..... N01 DE52456-05
ORGANIZATION..... ALABAMA, UNIVERSITY OF
ADDRESS..... BIRMINGHAM ALABAMA
INITIAL START DATE..... 06-20-75
EXPIRATION DATE..... 10-19-80
ORGANIZATION CODE..... 0556601
PROJECT DIRECTOR..... MC GHEE, JERRY R
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: SALIVARY IMMUNOGLOBULIN A DEFICIENCY IN HUMANS RELATED TO
CARIES

OBJECTIVES AND WORK SCOPE :

The Contractor proposes to study a population of more than 25 IgA deficient patients and appropriate controls to correlate the presence or absence of IgA and caries incidence. He will measure salivary immunoglobulins and factors such as lysozyme, lactoferrin, and peroxidase. Plaque will be collected and analyzed for the principal oral bacteria present. Plaque proteins will be studied from the standpoint of in situ function-possible coating and/or aggregation of important plaque bacteria. He will correlate these findings with the clinical picture occurring in these patients, including past and present caries, and gingival and Periodontal Disease indices.

IDENTIFICATION NUMBER..... N01 DE52458-05
ORGANIZATION..... HAZLETON LABORATORIES
ADDRESS..... VIENNA VIRGINIA
INITIAL START DATE..... 06-27-75
EXPIRATION DATE..... 01-31-79
ORGANIZATION CODE..... 9640802
PROJECT DIRECTOR..... DALGARD, DAN W
NIDR PROJECT OFFICER..... BOWEN, WILLIAM H
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: DEVELOPMENT OF A NON-HUMAN PRIMATE MODEL

OBJECTIVES AND WORK SCOPE :

The Contractor proposes to develop an animal model for the study of dental caries in the new world species, namely, the *Saimirc sciureus* species. Emphasis will be placed on designing a method which will induce caries rapidly and yet one in which the results will be applicable to the human disease. In addition to studying caries susceptibility in the feral-reared imported animal, breeding groups will be established to enable studies in the domestically reared infants.

IDENTIFICATION NUMBER..... N01 DE52459-05
ORGANIZATION..... CONNECTICUT, UNIVERSITY OF, HLTH. C
ADDRESS..... FARMINGTON CONNECTICUT
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 1860150
PROJECT DIRECTOR..... MACKO, DOUGLAS
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52460-05
ORGANIZATION..... STATE UNIV. OF NEW YORK, STONY BROO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 5992612
PROJECT DIRECTOR..... RIPA, LOUIS W
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52461-05
ORGANIZATION..... FORSYTH DENTAL CENTER
ADDRESS..... BOSTON MASSACHUSETTS
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 2705601
PROJECT DIRECTOR..... DE PAOLA, PAUL F
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52462-04
ORGANIZATION..... EASTMAN DENTAL CENTER
ADDRESS..... ROCHESTER NEW YORK
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 2300901
PROJECT DIRECTOR..... LEVERETT, DENNIS H.
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER.....	NO1 DE52463-04
ORGANIZATION.....	ALABAMA, UNIVERSITY OF
ADDRESS.....	BIRMINGHAM ALABAMA
INITIAL START DATE.....	06-30-75
EXPIRATION DATE.....	02-28-79
ORGANIZATION CODE.....	0556601
PROJECT DIRECTOR.....	THOMAS, JOE P
NIDR PROJECT OFFICER.....	MILLER, ANN
NIDR CONTRACT SPECIALIST.....	MULLEN, EDITH
TITLE:	COMMUNITY CARRIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER.....	N01 DE52465-05
ORGANIZATION.....	WISCONSIN ST. DEPT. OF HLTH. SOCIAL
ADDRESS.....	MADISON WISCONSIN
INITIAL START DATE.....	06-30-75
EXPIRATION DATE.....	02-28-79
ORGANIZATION CODE.....	9332801
PROJECT DIRECTOR.....	KRIPPENE, BETTY
NIDR PROJECT OFFICER.....	MILLER, ANN
NIDR CONTRACT SPECIALIST.....	BLEVINS, MARION
TITLE: COMMUNITY CARRIES PREVENTION DEMONSTRATION PROJECTS	

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52466-04
ORGANIZATION..... MICHIGAN DEPARTMENT OF PUBLIC HEALTH
ADDRESS..... LANSING MICHIGAN
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 5232601
PROJECT DIRECTOR..... SZWEJDA, LOUIS F
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52467-04
ORGANIZATION..... MONTANA STATE DEPT. OF HEALTH
ADDRESS..... HELENA MONTANA
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 5434001
PROJECT DIRECTOR..... TERRILL, JACK A
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52468-04
ORGANIZATION..... VIRGINIA COMMONWEALTH UNIVERSITY
ADDRESS..... RICHMOND VIRGINIA
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 0353201
PROJECT DIRECTOR..... FISHMAN, SHERWIN R
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52469-05
ORGANIZATION..... INDEPENDENCE NEIGHBORHOOD COUNCILS
ADDRESS..... INDEPENDENCE MISSOURI
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 1069301
PROJECT DIRECTOR..... SCHAEFER, ROY H
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Establish and conduct a school based caries prevention demonstration program; report data on the cost effectiveness of the program; develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with a 0.2 percent solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explorer. Costs and staff time for implementing and conducting the project will be recorded.

IDENTIFICATION NUMBER..... N01 DE52470-05
ORGANIZATION..... CALIFORNIA, UNIVERSITY OF, SAN FRAN
ADDRESS..... SAN FRANCISCO CALIFORNIA
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 0577508
PROJECT DIRECTOR..... SILVERSTEIN, STEVEN
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52471-05
ORGANIZATION..... TEXAS HEALTH SCI. CENTER, UNIVERSIT
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 0578417
PROJECT DIRECTOR..... FRIEDMAN, LAWRENCE A
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: COMMUNITY CARRIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52472-05
ORGANIZATION..... COLORADO STATE DEPARTMENT OF HEALTH
ADDRESS..... DENVER COLORADO
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 1719501
PROJECT DIRECTOR..... REGER, ROY H
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with a 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explorer. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52473-05
ORGANIZATION..... ERIE COUNTY INC., RESEARCH FOR HEAL
ADDRESS..... BUFFALO NEW YORK
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 6917001
PROJECT DIRECTOR..... BISSELL, G. DONALD
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECT

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52474-04
ORGANIZATION..... GEAUGA CO. GEN. HLTH. DIST. HLTH. D
ADDRESS..... CHARDON OHIO
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 1069501
PROJECT DIRECTOR..... SHERMAN, CAROL
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52475-04
ORGANIZATION..... HARVARD UNIVERSITY
ADDRESS..... BOSTON MASSACHUSETTS
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 3212902
PROJECT DIRECTOR..... DOGON, I. LEON
NIDR PROJECT OFFICER..... MILLER, ANN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: COMMUNITY CARIES PREVENTION DEMONSTRATION PROJECTS

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

IDENTIFICATION NUMBER..... N01 DE52476-04
ORGANIZATION..... TUFTS UNIVERSITY
ADDRESS..... BOSTON MASSACHUSETTS
INITIAL START DATE..... 06-27-75
EXPIRATION DATE..... 03-31-80
ORGANIZATION CODE..... 8422704
PROJECT DIRECTOR..... WHITE, GEORGE E
NIDR PROJECT OFFICER..... FREW, RALPH A
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: DEVELOPMENT & EVAL OF A DIAGNOSTIC SYSTEM FOR EARLY DETECTION
CARIES

OBJECTIVES AND WORK SCOP :

"The Development and Evaluation of a Diagnostic System for the Early Detection of Dental Caries". This is a research and development of a valid clinical method for diagnosing early carious lesions in human teeth. This method will rely on clinical trials for its final evaluation with comparison made on the basis of caries development between groups differentially exposed to the test agent or procedure.

IDENTIFICATION NUMBER..... N01 DE52478-05
ORGANIZATION..... MICHIGAN, UNIVERSITY OF
ADDRESS..... ANN ARBOR MICHIGAN
INITIAL START DATE..... 06-23-75
EXPIRATION DATE..... 06-22-80
ORGANIZATION CODE..... 5249701
PROJECT DIRECTOR..... MC NAMARA, JAMES A
NIDR PROJECT OFFICER..... CHRISTIANSEN, R L
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: MUSCLE REATTACHMENT AND MIGRATION WITH OR WITHOUT OSSEOUS
SURGERY

OBJECTIVES AND WORK SCOPE :

This project will provide for studies to determine changes in neuromuscular physiology and craniofacial function due to muscle reattachment, transplantation, and migration with or without osseous surgery, utilizing a young adult primate animal model system to identify and describe stages in muscle adaptation in two types of surgical procedures designed by the Contractor.

IDENTIFICATION NUMBER.....	N01 DE52484-05
ORGANIZATION.....	PENNSYLVANIA, UNIVERSITY OF
ADDRESS.....	PHILADELPHIA PENNSYLVANIA
INITIAL START DATE.....	06-27-75
EXPIRATION DATE.....	06-26-80
ORGANIZATION CODE.....	6463801
PROJECT DIRECTOR.....	YANKELL, SAMUEL L
NIDR PROJECT OFFICER.....	SHERN, ROALD J
NIDR CONTRACT SPECIALIST.....	MULLEN, EDITH
TITLE: CLINICAL SCREENING OF ANTIPLAQUE AND ANTIMICROBIAL AGENTS	

OBJECTIVES AND WORK SCOPE :

Clinical testing of potential antiplaque and antimicrobial agents. Agents shall be applied both singly and in combination in vehicles such as mouthrinses and gels in various regimens and durations. Test groups shall not consist of more than 50 subjects. All testing shall be short term, i.e. 1-16 weeks. CORE MEASUREMENTS - plaques extent; dry weight, ph; microflora, gingivitis. ELECTIVE MEASUREMENTS - thickness; biochemistry; cervicular flow photography, p0.

IDENTIFICATION NUMBER..... N01 DE62457-04
ORGANIZATION..... PAN AMERICAN HEALTH ORGANIZATION
ADDRESS..... WASHINGTON DISTRICT OF COLUMBIA
INITIAL START DATE..... 08-01-75
EXPIRATION DATE..... 12-31-78
ORGANIZATION CODE..... 6380201
PROJECT DIRECTOR..... GILLESPIE, GEORGE W
NIDR PROJECT OFFICER..... BOWEN, WILLIAM H
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: INVESTIGATION OF PLAQUE WITH HIGH/LOW CARIES IN MEDELLIN
COLOMBIA,SA

OBJECTIVES AND WORK SCOPE :

The Contractor proposes to investigate the biochemical and microbial composition of plaque and saliva in two communities with high and low caries in Medellin, Colombia, South America.

IDENTIFICATION NUMBER..... N01 DE62479-04
ORGANIZATION..... DYNAPOL
ADDRESS..... PALA ALTO CALIFORNIA
INITIAL START DATE..... 04-10-76
EXPIRATION DATE..... 04-09-79
ORGANIZATION CODE..... 1160101
PROJECT DIRECTOR..... CROSBY, GUY
NIDR PROJECT OFFICER..... ROGERS, WILLIAM E
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: SYNTHESIS, CHARACTERIZATION, EVALUATION OF DEHYDROCHALCONE
ANALOGS

OBJECTIVES AND WORK SCOPE :

The objective of this research is to synthesize, physicochemically characterize, and evaluate the sensory properties and stability of new dihydrochalcone analogs in a search for a superior sweetener of commercial utility possessing, as nearly as possible, a tast quality comparable to that of sucrose. Evaluation of the properties of the new sweeteners shall include determination of purity, melting point, hygroscopicity, stability in the dry state, solubility in various solvents, sweetness ratings, and other sensory properties, and stability under a variety of conditions of manufacture, storage, and use.

IDENTIFICATION NUMBER..... N01 DE62486-04
ORGANIZATION..... JOHNS HOPKINS UNIVERSITY
ADDRESS..... BALTIMORE MARYLAND
INITIAL START DATE..... 06-01-76
EXPIRATION DATE..... 05-31-80
ORGANIZATION CODE..... 4134401
PROJECT DIRECTOR..... NEIBYL, JENNIFER
NIDR PROJECT OFFICER..... CHRISTIANSEN, R L
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: INCIDENCE OF ORAL CLEFTS OF FAMILIES BEARING CLEFT LIP
CHILDREN

OBJECTIVES AND WORK SCOPE :

A study to determine the feasibility of studying high-risk mothers (mothers who have given birth to cleft children previously) with respect to potential environmental and metabolic etiological factors affecting their children prenatally and resulting in oral clefts. The final target of such research would be to identify a large-scale high-risk group of mothers and to reduce the risk by modifying prenatal circumstances. The first step in the development of a preventive program for congenital cleft lip and palate will be to identify likely etiologic factors and explore a small population to determine the needs and objectives of a larger study.

IDENTIFICATION NUMBER..... N01 DE62488-04
ORGANIZATION..... STATE UNIV. OF NEW YORK, BUFFALO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 05-01-76
EXPIRATION DATE..... 10-31-79
ORGANIZATION CODE..... 5992614
PROJECT DIRECTOR..... NISENGARD, RUSSELL J
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: IMMUNOLOGIC CROSS-REACTIVITY OF ANTIGENS FROM ORAL
STREPTOCOCCI

OBJECTIVES AND WORK SCOPE :

This research study shall be conducted to study the immunologic cross-reactivity of oral streptococcal antigens with mammalian tissue and tissue compounds. The contractor shall be required to collect representative strains of oral streptococci. The contractor shall be required to obtain sera from rheumatic fever patients and heart tissues from autopsy of cases with rheumatic fever as a diagnosed component of their medical history. Delineate the streptococcal antigenic determinants responsible for any binding to tissue by extracting and fractionating, by suitable means, whole cells of the indicated immunoreactive streptococci.

IDENTIFICATION NUMBER..... NO1 DE62491-04
ORGANIZATION..... ALABAMA, UNIVERSITY OF
ADDRESS..... BIRMINGHAM ALABAMA
INITIAL START DATE..... 06-28-76
EXPIRATION DATE..... 12-31-79
ORGANIZATION CODE..... 0556601
PROJECT DIRECTOR..... SHIOTA, T
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: USE OF MUTANTS OF CARIOGENIC STREPTOCOCCI TO PREVENT DENTAL
CARIES

OBJECTIVES AND WORK SCOPE :

The Contractor will select at least one strain from each of at least two different serotypes of *S. mutans* to conduct a research study on the use of mutants of cariogenic streptococci to prevent dental caries. These strains should produce abundant glucan and should be proven to be cariogenic in rodents.

IDENTIFICATION NUMBER..... N01 DE62493-04
ORGANIZATION..... ABCOR, INC
ADDRESS..... CAMBRIDGE MASSACHUSETTS
INITIAL START DATE..... 06-30-76
EXPIRATION DATE..... 08-14-79
ORGANIZATION CODE..... 9614001
PROJECT DIRECTOR..... WILLIAMS, DAVID L
NIDR PROJECT OFFICER..... ROUSSOS, GERASSIMOS
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: ENZYMATIC PREVENTION AND CONTROL OF DENTAL PLAQUE FORMATION

OBJECTIVES AND WORK SCOPE :

A study designed to develop an enzyme mixture which effectively and safely prevents plaque accumulation and dental caries. Conduct a biphasic screening program involving a preliminary in vitro evaluation on human dental plaque followed by testing in the rat and leading to the formulation of an enzyme mixture which effectively and safely prevents plaque and dental caries. The first phase will specifically involve the systematic determination of the composition of the enzyme mixture which is most effective in vitro in dispersing and/or solubilizing: freshly collected human dental pellicle and supragingival plaque; and plaque formed on human tooth crowns incubated in vitro in a growth medium consisting of freshly collected human saliva inoculated with Strep. mutans. Determination of the in vivo antiplaque and anticaries effectiveness of the enzyme mixture will be conducted at Tufts University, using the National Caries Program's standard Norway rat screening procedure.

IDENTIFICATION NUMBER..... N01 DE62494-04
ORGANIZATION..... VIRGINIA COMMONWEALTH UNIVERSITY
ADDRESS..... RICHMOND VIRGINIA
INITIAL START DATE..... 06-30-76
EXPIRATION DATE..... 06-29-80
ORGANIZATION CODE..... 0353201
PROJECT DIRECTOR..... FREER, RICHARD J
NIDR PROJECT OFFICER..... SCHIFFMANN, E
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: EVALUATION OF SMALL SYNTHETIC PEPTIDES CHEMOATTRACTANTS FOR
LEUCOCYTES

OBJECTIVES AND WORK SCOPE :

"Evaluation of Small Synthetic Peptides as Chemottractants for Leucocytes and their Application to Periodontal Disease" is a study which will provide for the synthesis of 20 or more formylmethionyl peptides or related compounds per year. The synthetic procedure will involve well-developed methods with few side reactions. The purification of the compounds should be accomplished with simple recrystallization and ion-exchange methods. The compounds then should be tested for chemotactic activity, effects fo increasing molecular size, presence or absence of N-acylation, esterification or amidation of carboxyl groups.

IDENTIFICATION NUMBER..... N01 DE62496-04
ORGANIZATION..... TEXAS HEALTH SCI. CENTER, UNIVERSIT
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 06-30-76
EXPIRATION DATE..... 09-30-79
ORGANIZATION CODE..... 0578417
PROJECT DIRECTOR..... FRIEDMAN, LAWRENCE A
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: TO EVALUATE ORAL RINSING PREVENT DENTAL CARIES IN CHILDREN

OBJECTIVES AND WORK SCOPE :

The Contractor proposed to design and implement a three year longitudinal clinical trial to study the effect of supervised oral rinsing with a sodium monofluorophosphate mouthrinse on preventing dental caries in children. A population of approximately 900 subjects from an area that has low fluoride in its drinking water will be utilized.

IDENTIFICATION NUMBER..... N01 DE62497-04
ORGANIZATION..... MAYO FOUNDATION
ADDRESS..... ROCHESTER MINNESOTA
INITIAL START DATE..... 09-30-76
EXPIRATION DATE..... 09-29-80
ORGANIZATION CODE..... 4976101
PROJECT DIRECTOR..... DYCK, PETER J
NIDR PROJECT OFFICER..... DUBNER, RONALD
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: ORAL-FACIAL EVALUATION OF PREVIOUSLY UNTREATED TYPES OF
NEURALGIA

OBJECTIVES AND WORK SCOPE :

The contractor plans to establish whether an abnormality of cutaneous touch-pressure sensation, of pallesthesia, of thermal discrimination and of nociception can (or cannot) be demonstrated in trigeminal neuralgia and in atypical facial neuralgia; compare the type of abnormality of sensation is found in trigeminal neuralgia and in atypical facial neuralgia; determine whether morphometric and pathologic methods, of Cr V nerve twigs and ganglion, morphologic abnormality can be demonstrated in trigeminal neuralgia.

IDENTIFICATION NUMBER..... N01 DE62498-04
ORGANIZATION..... CALIFORNIA, UNIVERSITY OF, SAN FRAN
ADDRESS..... SAN FRANCISCO CALIFORNIA
INITIAL START DATE..... 09-30-76
EXPIRATION DATE..... 03-31-79
ORGANIZATION CODE..... 0577508
PROJECT DIRECTOR..... NEWBRUN, ERNEST
NIDR PROJECT OFFICER..... TOWNSLEY, JOHN D.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: DIETARY HABITS DENTAL PLAQUE COMPOSITION FRUCTOSE INTOLERANT
PATIENTS

OBJECTIVES AND WORK SCOPE :

Study of a population of patients with a confirmed diagnosis of fructose intolerance from the standpoint of dietary intake, oral hygiene, and dental pathology. The microbiology of dental plaque from specific dental sites of these subjects will be investigated & particular attention will be given to dental plaque levels of S, mutans, S, sanguis and Lactobacilli. In addition, the concentration of protein, hexose, ketohexose, calcium, phosphorus, magnesium and fluoride in these plaque specimens will be assayed. The glucose metabolism of the plaque specimens will be investigated from the standpoint of levels and types of organic acids produced and levels of selected enzymes present.

IDENTIFICATION NUMBER..... N01 DE72400-03
ORGANIZATION..... BAYLOR COLLEGE OF MEDICINE
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 09-01-77
EXPIRATION DATE..... 08-31-80
ORGANIZATION CODE..... 0481201
PROJECT DIRECTOR..... PEAVY, DUANE L
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: IMMUNOPATHOGENESIS OF RECURRENT APHTHOUS STOMATITIS &
BECHET'S SYNDROME

OBJECTIVES AND WORK SCOPE :

This project is a study into the immunopathogenesis of Recurrent Aphthous Stomatitis and Behcet's Syndrome, which will include: measurement of in vitro immune responsiveness of RAS and BS lymphocytes to oral mucosal antigens; determination of tissue specificity of lymphocyte-epithelial cell interactions; investigation of possible bacterial causes of BAS, particularly Streptococcus sanguis; and determination as to whether lymphocytes of RAS and BS patients are thymus-derived (T) or bone marrow-derived (B). The objectives are: to extend and attempt to confirm previous studies as well as to include Behcet's disease, and to determine whether or not a significant correlation exists between the immunological events observed during each exacerbation and whether or not the degree of reactivity correlates with the severity of the disease.

IDENTIFICATION NUMBER..... N01 DE72401-03
ORGANIZATION..... ILLINOIS, UNIVERSITY OF
ADDRESS..... CHICAGO ILLINOIS
INITIAL START DATE..... 09-01-77
EXPIRATION DATE..... 02-29-80
ORGANIZATION CODE..... 0577703
PROJECT DIRECTOR..... SADOWSKY, CYRIL
NIDR PROJECT OFFICER..... NISWANDER, JERRY D.
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: LONG-TERM EFFECTS OF ORTHODONTIC TREATMENT

OBJECTIVES AND WORK SCOPE :

Evaluate the long-term effects of orthodontic treatment on the periodontal tissues, occlusal function, and tempo-mandibular joint. Also, attempt to identify factors related to the original malocclusion, treatment rendered, and post-treatment stability which may have an adverse effect on long-term and health.

IDENTIFICATION NUMBER..... N01 DE72402-03
ORGANIZATION..... TEXAS HEALTH SCI. CENTER, UNIVERSIT
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 07-15-77
EXPIRATION DATE..... 04-14-79
ORGANIZATION CODE..... 0578417
PROJECT DIRECTOR..... BROWN, LEE R
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: STREPTOCOCCUS MUTANS IN PATIENTS WITH RADIATION INDUCED
XEROSTOMIA

OBJECTIVES AND WORK SCOPE :

This contracto represents new work utilizing saliva and serum samples collected over five years during performance of contract N01-DE-12377 with the Univ. of Texas. The examinations of saliva and serum for specific antibody activity of any kind was not done under this contract. However, saliva and serum samples of 42 xerostomia patients are still available and will be used for proposed study to measure with radiation-induced xerostomia. The Government envisions a period of performance for one year.

IDENTIFICATION NUMBER..... N01 DE72403-03
ORGANIZATION..... CASE WESTERN RESERVE UNIVERSITY
ADDRESS..... CLEVELAND OHIO
INITIAL START DATE..... 07-11-77
EXPIRATION DATE..... 07-01-79
ORGANIZATION CODE..... 0218601
PROJECT DIRECTOR..... CAPLAN, ARNOLD I
NIDR PROJECT OFFICER..... HASCALL, VINCENT C
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: BIOSYNTHESIS OF CARTILAGE PROTEOGLYCANS BY CHICK LIMB GROWN
IN VITRO

OBJECTIVES AND WORK SCOPE :

The work called for in this contract will involve the preparation of radioisotopically labeled proteoglycans from chick limb bud chondrocyte cultures. The proteoglycans will be labeled according to different pulse and pulse for further in-house experimentation. The chick limb bud cultures will be chondrocyte cultures can be obtained which represent different times in development. The methods used for the preparation of the cultured chondrocytes of the proteoglycans obtained from them are established and have been described in the literature.

IDENTIFICATION NUMBER..... N01 DE72404-03
ORGANIZATION..... FLORIDA, UNIVERSITY OF
ADDRESS..... GAINESVILLE FLORIDA
INITIAL START DATE..... 08-15-77
EXPIRATION DATE..... 08-14-80
ORGANIZATION CODE..... 0513806
PROJECT DIRECTOR..... LOTZKAR, S.
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: CONCENTRATION & FREQUENCY OF SODIUM FLORIDE MOUTHRINSE ON
CARIES

OBJECTIVES AND WORK SCOPE :

Test the effectiveness in reducing new caries increment over a three year period of: a 0.5% sodium fluoride mouthrinse (0.0225% F) used daily in school; a 0.2% sodium fluoride (0.09% F) mouthrinse used daily in school; a 0.5% sodium fluoride mouthrinse used weekly in school; and a 0.2% sodium fluoride mouthrinse used weekly in school. To compare the effectiveness of the different concentrations and frequencies.

IDENTIFICATION NUMBER..... N01 DE72405-03
ORGANIZATION..... LITTON BIONETICS
ADDRESS..... KENSINGTON MARYLAND
INITIAL START DATE..... 08-01-77
EXPIRATION DATE..... 07-31-80
ORGANIZATION CODE..... 0686503
PROJECT DIRECTOR..... GARD, ELIZABETH A.
NIDR PROJECT OFFICER..... HOOKS, JOHN
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: ATTEMP SJOGREN'S SYNDROME, RECURRENT APHTHOUS ULCERS &
BECHET'S SYN

OBJECTIVES AND WORK SCOPE :

Litton Bionetics will provide testing for anti-nuclear antibody by fluorescent antibody and readioimmunodiffusion assays ten rhesus monkeys of less than one year of age. Ten animals negative to both tests for antibody will be chosen, all of which are negative to a tuberculin skin test using Old Tuberculin. These animals will be inoculated intracerebrally, intraperitoneally, intravenously, and subcutaneously as directed by the Project Officer with preparations of appropriate biopsy specimens supplied by NIDR. These animals will be maintained for two years and observed daily for early signs of clinical disease. If an animal should develop any disease, NIDR will be notified immediately. A copy of the clinical records of each animal for each four-month period will be supplied to NIDR.

IDENTIFICATION NUMBER..... N01 DE72406-03
ORGANIZATION..... CHICAGO, UNIVERSITY OF
ADDRESS..... CHICAGO ILLINOIS
INITIAL START DATE..... 08-15-77
EXPIRATION DATE..... 03-31-79
ORGANIZATION CODE..... 1413601
PROJECT DIRECTOR..... NEWCOMB, RICHARD W.
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: PRODUCTION OF SPECIFIC ANTISERA ANTI-RAT IGA AND S-IGA AND
ANTI-MONKEY

OBJECTIVES AND WORK SCOPE :

Produce high titer antisera to rat or monkey proteins with specificity as follows: goat anti-IgA will react with IgA, but not (by tests defined) with IgG, IgM, or other serum or exocrine fluid proteins; goat anti-a chain will react with IgA, but not with IgG, IgM, immunoglobulin light chains, or other serum or exocrine fluid proteins; goat anti-sIgA will react with IgA from serum and exocrine sources and probably with SC, but will not react with IgG, IgM, immunoglobulin light chains, or other colostrum or salivary proteins; goat anti-IgM will react with IgM, but not with IgG, IgA, or other serum proteins; and goat anti-u chain will react with IgM, but not with IgG, IgA, immunoglobulin light chains or other serum proteins.

IDENTIFICATION NUMBER..... N01 DE72407-03
ORGANIZATION..... EASTMAN DENTAL CENTER
ADDRESS..... ROCHESTER NEW YORK
INITIAL START DATE..... 09-30-77
EXPIRATION DATE..... 09-30-80
ORGANIZATION CODE..... 2300901
PROJECT DIRECTOR..... LEVERETT, DENNIS H.
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: EVALUATE TOOTH-CLEANING PRIOR TO WEEKLY RINSING W/DILUTE
SOLUTION

OBJECTIVES AND WORK SCOPE :

This project is for a longitudinal clinical research study in which the effect upon dental caries of weekly mouthrinsing with a 0.2% sodium fluoride solution without prior cleaning of the teeth will be compared with the effect of rinsing preceded by cleaning of the teeth, either with a toothbrush alone or with a toothbrush and dental floss.

IDENTIFICATION NUMBER..... N01 DE72408-03
ORGANIZATION..... STATE UNIV. OF NEW YORK, BUFFALO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 09-01-77
EXPIRATION DATE..... 08-31-80
ORGANIZATION CODE..... 5992614
PROJECT DIRECTOR..... STINSON, MURRAY W.
NIDR PROJECT OFFICER..... IKARI, NORMAN S
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: SEARCH CROSS-REACTION ANTIGENS TO ACIDOGENIC BACTERIA HUMAN
ORAL FLORA

OBJECTIVES AND WORK SCOPE :

A study to search for antigens from non-pathogenic bacteria which cross-react with human oral strains of acidogenic streptococci, lactobacilli, and Actinomyces. Such antigens, if found, might afford more suitable alternative components of anti-caries vaccines than cariogenic and acidogenic bacteria and their products.

IDENTIFICATION NUMBER..... N01 DE72409-03
ORGANIZATION..... EASTMAN DENTAL CENTER
ADDRESS..... ROCHESTER NEW YORK
INITIAL START DATE..... 09-30-77
EXPIRATION DATE..... 09-29-80
ORGANIZATION CODE..... 2300901
PROJECT DIRECTOR..... CURZON, M.E.J.
NIDR PROJECT OFFICER..... KINGMAN, ALBERT
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: STRONTIUM, LITHIUM & FLUORINE IN VITRO FORMATION OF PLAQUE IN
RATS

OBJECTIVES AND WORK SCOPE :

Determine the in vitro effects of various levels of strontium, lithium, and fluorine, both singly and in combination, on the physicochemical, microbiological, and biochemical parameters which are known or thought to contribute significantly to dental plaque formation and activity: adsorption of salivary proteins to hydroxyapatite; sorption of bacteria to hydroxyapatite; bacterial saccharides; bacterial aggregation; and synthesis and breakdown of extracellular polysaccharides. Also, determine the prenatal, preeruptive, and posteruptive effects of various levels of strontium, lithium, and fluorine on plaque formation and caries development in the rat.

IDENTIFICATION NUMBER..... N01 DE72410-03
ORGANIZATION..... STATE UNIV. OF NEW YORK, BUFFALO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 09-30-77
EXPIRATION DATE..... 10-31-79
ORGANIZATION CODE..... 5992614
PROJECT DIRECTOR..... BEUTNER, ERNST H.
NIDR PROJECT OFFICER..... ROBRISH, STANLEY
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: APPLICATION FLUORESCENT ANTIBODY METHODS ORAL MICROORGANISMS
IN CARIES

OBJECTIVES AND WORK SCOPE :

This project represents Phase I of a two phase study of the application of fluorescent antibody methods to determination of the etiology of dental caries. In this phase, the contractor will prepare and test fluorescent antibody reagents for fourteen different microorganisms. He will also develop and test the feasibility of methodology, both laboratory and clinical, to be used in the longitudinal study, which will be negotiated as Phase II after the successful completion of Phase I.

IDENTIFICATION NUMBER..... NO1 DE72411-03
ORGANIZATION..... APPLIED MANAGEMENT SCIENCES
ADDRESS..... SILVER SPRING MARYLAND
INITIAL START DATE..... 09-30-77
EXPIRATION DATE..... 09-30-80
ORGANIZATION CODE..... 9643101
PROJECT DIRECTOR..... SKINNER, DOUGLAS E.
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: ACIDULATED PHOSPHATE-FLUORIDE USED DAILY AS TABLET OR
SOLUTION

OBJECTIVES AND WORK SCOPE :

This project is for a longitudinal clinical trial to determine the effect on dental caries of neutral sodium fluoride (NaF) and acidulated phosphate-fluoride (APF) when each is used as a tablet and as a solution. The study population will comprise approximately 1,625 school children, 12-14 years old, who reside in a community where the drinking water contains less than 0.3 ppm fluoride and the school population is relatively stable.

IDENTIFICATION NUMBER..... N01 DE72499-03
ORGANIZATION..... STATE UNIV. OF NEW YORK, BUFFALO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 03-14-77
EXPIRATION DATE..... 06-13-80
ORGANIZATION CODE..... 5992614
PROJECT DIRECTOR..... ALBINO, JUDITH E
NIDR PROJECT OFFICER..... HAUSCH, GEORGE H
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: DEV. OF METHODS FOR BEHAVIORAL MEASUREMENTS RELATED TO
MALOCCLUSION

OBJECTIVES AND WORK SCOPE :

Develop new and meaningful methods for objective and standardized determination of the impact of malocclusion and its treatment. This first phase is specifically to determine whether it is feasible to develop a behavioral and dental instrument that will measure the impact of malocclusion on the individual. Such an instrument is to be pretested on a population of one hundred families with eighth or ninth graders not undergoing or planning orthodontic treatment and fifty families with children who are planning orthodontic treatment. A revised instrument will then be field-tested on another similar population of 150 families.

IDENTIFICATION NUMBER..... NO1 DE82412-02
ORGANIZATION..... INNSBRUCK, UNIVERSITY OF
ADDRESS..... INNSBRUCK
INITIAL START DATE..... 01-16-78
EXPIRATION DATE..... 01-15-79
ORGANIZATION CODE..... 3623301
PROJECT DIRECTOR..... WICK, GEORGE
NIDR PROJECT OFFICER..... MARTIN, GEORGE R.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: IMMUNOFLUORESCENT ID OF BASEMENT MEMBRANES WITH ANTISERA
NEWLY COLLAGEN

OBJECTIVES AND WORK SCOPE :

Perform indirect immunofluorescent localization of reactive structures with specific antibodies, utilizing antibodies against: purified tumor basement membrane collagen; type I procollagen; type III procollagen; and fibrinogen or some other noncollagenous, nonconnective tissue protein.

IDENTIFICATION NUMBER..... N01 DE82413-02
ORGANIZATION..... EASTMAN DENTAL CENTER
ADDRESS..... ROCHESTER NEW YORK
INITIAL START DATE..... 09-29-78
EXPIRATION DATE..... 09-28-80
ORGANIZATION CODE..... 2300901
PROJECT DIRECTOR..... POLSON, ALAN M.
NIDR PROJECT OFFICER..... NISWANDER, JERRY D.
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: LONG-TERM EFFECTS OF ORTHODONTIC TREATMENT

OBJECTIVES AND WORK SCOPE :

The Contractor will design and conduct a two year study to evaluate the condition of the teeth, supporting structures (gums and bone), and occlusion (bite) of those who have had orthodontic treatment and to compare them with those who have not had orthodontic treatment. A study population of 100 or more patients who have completed full orthodontic treatment more than 10 years ago will be assembled. A suitable control group will also be obtained. The periodontal and general oral health and functional status of the study and control groups will be evaluated using various clinical examinations and measurements and radiographic techniques.

IDENTIFICATION NUMBER.....	N01 DE82414-02	
ORGANIZATION.....	MAYO FOUNDATION	
ADDRESS.....	ROCHESTER	MINNESOTA
INITIAL START DATE.....	09-30-78	
EXPIRATION DATE.....	09-29-80	
ORGANIZATION CODE.....	4976101	
PROJECT DIRECTOR.....	ROGERS, ROY S.	
NIDR PROJECT OFFICER.....	FRAZIER, PAUL D	
NIDR CONTRACT SPECIALIST.....	BLEVINS, MARION	
TITLE: IMMUNOPATHOGENESIS OF RECURRENT APTHOUS STOMATITIS & BEHCET'S SYNDROME		

OBJECTIVES AND WORK SCOPE :

This project is a study into the immunopathogenesis of Recurrent Aphthous Stomatitis (RAS) and Behcet's Syndrome (BS) to measure in vitro the immune responsiveness of lymphocytes from RAS and BS patients in relation to the severity and stages of the disease, determine if peripheral blood lymphocytes from RAS and BS patients are responsive to oral epithelial antigens and S sanguis antigens and determine whether lymphocytes of RAS and BS patients are thymus-derived (T) or bone marrow-derived (B). The objectives of the present solicitation are to extend previous studies and to include Behcet's disease, and to determine whether or not a significant correlation exists between the immunological events observed during each exacerbation and whether or not the degree of reactivity correlates with the severity of the disease.

IDENTIFICATION NUMBER..... N01 DE82415-02
ORGANIZATION..... CALIFORNIA, UNIVERSITY OF, SAN FRAN
ADDRESS..... SAN FRANCISCO CALIFORNIA
INITIAL START DATE..... 09-30-78
EXPIRATION DATE..... 09-29-80
ORGANIZATION CODE..... 0577508
PROJECT DIRECTOR..... GREENSPAN, JOHN S.
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: IMMUNOPATHOGENESIS OF RECURRENT APTHOUS STOMATITIS &
BEHCET'S SYNDROME

OBJECTIVES AND WORK SCOPE :

Study the immunopathogenesis of recurrent aphthous stomatitis (RAS) and behcet's syndrome (BS) to: measure in vitro the immune responsiveness of lymphocytes from RAS and BS patients in relation to the severity and stages of the disease; determine if peripheral blood lymphocytes from RAS and BS patients are responsive to oral epithelial antigens and S. sanguis antigens; and determine whether lymphocytes of RAS and BS patients are thymus-derived (T) or bone marrow-derived (B). The present objectives are to: extend previous studies and include Behcet's disease; and determine whether or not a significant correlation exists between the immunological events observed during each exacerbation and whether or not the degree of reactivity correlates with the severity of the disease.

IDENTIFICATION NUMBER..... N01 DE82416-02
ORGANIZATION..... TEXAS HEALTH SCI. CENTER, UNIVERSIT
ADDRESS..... HOUSTON TEXAS
INITIAL START DATE..... 09-30-78
EXPIRATION DATE..... 09-29-81
ORGANIZATION CODE..... 0578417
PROJECT DIRECTOR..... FRIEDMAN, LAWRENCE A
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: EFFECT OF DAILY MOUTHRINSING WITH STANNOUS FLUORIDE OR
SODIUM FLUORIDE

OBJECTIVES AND WORK SCOPE :

The Contractor will implement a 3-year longitudinal clinical trial to study the effects of mouthrinsing with stannous fluoride and sodium fluoride upon the development of dental caries, dental plaque, gingivitis, and extrinsic tooth staining. A test population of approximately 500 students will be utilized, one half of the subjects rinsing once a day in school with 10 ml. of a 0.1% solution of stannous fluoride (SnF₂) and the other half rinsing once a day in school with 10 ml. of a 0.05% solution of sodium fluoride (NaF).

IDENTIFICATION NUMBER..... N01 DE82417-02
ORGANIZATION..... EASTMAN DENTAL CENTER
ADDRESS..... ROCHESTER NEW YORK
INITIAL START DATE..... 09-30-78
EXPIRATION DATE..... 09-29-81
ORGANIZATION CODE..... 2300901
PROJECT DIRECTOR..... LEVERETT, DENNIS H.
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: EFFECT OF DAILY MOUTHRINSING WITH STANNOUS FLUORIDE OR
SODIUM FLUORIDE

OBJECTIVES AND WORK SCOPE :

The Contractor will implement a 3-year longitudinal clinical trial to study the effects of mouthrinsing with stannous fluoride and sodium fluoride upon the development of dental caries, dental plaque, gingivitis, and extrinsic tooth staining. A test population of approximately 500 students will be utilized, one half of the subjects rinsing once a day in school with 10 ml. of a 0.1% solution of stannous fluoride (SnF₂) and the other half rinsing once a day in school with 10ml. of a 0,05% solution of sodium fluoride (NaF).

IDENTIFICATION NUMBER..... N01 DE92418-01
ORGANIZATION..... AMERICAN TYPE CULTURE COLLECTION
ADDRESS..... ROCKVILLE MARYLAND
INITIAL START DATE..... 12-01-78
EXPIRATION DATE..... 11-30-79
ORGANIZATION CODE..... 0397101
PROJECT DIRECTOR..... GHERNA, ROBERT L.
NIDR PROJECT OFFICER..... KRICHEVSKY, MICAH I.
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: CHARACTERIZATION & IDENTIFICATION OF PLEDMORPHIC ORAL
BACTERIA

OBJECTIVES AND WORK SCOPE:

The contractor will establish a set of well authenticated strains of various genera of orla microorganisms which will be available for distribution to oral microbiologists; compare results of various common media and methods for assessing the same properties; build a data base describing both authenticated laboratory strains and fresh clinical isolates; and construct and test a probability system for identifcaiton of plemorphic bacteria from the oral cavity.

IDENTIFICATION NUMBER..... N01 DE92419-01
ORGANIZATION..... STATE UNIV. OF NEW YORK, STONY BROO
ADDRESS..... ALBANY NEW YORK
INITIAL START DATE..... 01-15-79
EXPIRATION DATE..... 01-01-80
ORGANIZATION CODE..... 5992612
PROJECT DIRECTOR..... RIPA, LOUIS W.
NIDR PROJECT OFFICER..... SWANGO, PHILIP A
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: EFFECT OF PRIOR TOOTHCLEANING ON EFFICACY OF SEMI-ANNUAL
FLUORIDE TREAT

OBJECTIVES AND WORK SCOPE :

This procurement is for the conduct of a longitudinal study to assess the effect of prior toothcleaning upon the anti-caries efficacy of semi-annual professionally applied topical fluoride treatments. The proposed study will provide a comparison of the efficacy of semi-annual professionally administered APF gel treatments when preceded by either a conventional pumice prophylaxis, self-cleaning of the teeth by subjects using a toothbrush and dental floss, or no tooth cleaning.

Three study groups will be established, each containing approximately one-third of the subjects at the beginning of the study. Subjects will be randomly assigned to groups. Subjects in Group I will receive semi-annually a professional application of acidulated phosphate fluoride gel that contains 1.23% fluoride and has a pH of approximately 3.0. Each gel application will be preceded by a thorough dental prophylaxis. Calculus will be removed as necessary. Group II will receive semi-annual fluoride gel applications, clean their own teeth with a toothbrush, dentifrice, and dental floss. A professional prophylaxis will not be administered. Subjects in Group III will receive semi-annual fluoride gel treatments as described for Groups I and II, except that no toothcleaning of any kind will be performed prior to treatment.

IDENTIFICATION NUMBER..... N01 DE92420-01
ORGANIZATION..... MICROBIOLOGICAL ASSOCIATES
ADDRESS..... BETHESDA MARYLAND
INITIAL START DATE..... 05-01-79
EXPIRATION DATE..... 04-30-80
ORGANIZATION CODE..... 0000000
PROJECT DIRECTOR..... DINOWITZ, MARSHALL
NIDR PROJECT OFFICER..... JENSON, ALFRED B.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: SEARCH FOR DIABETOGENIC VIRUSES

OBJECTIVES AND WORK SCOPE :

Provide services for a two-part screening procedure for detecting diabetogenic viruses. An estimated forty candidate diabetogenic viruses (provided by the Government) will be screened for their capacity to alter glucose homeostasis by infecting pancreatic islet cells of mice and rats. Results will be tabulated on data sheets and provided to the Government.

IDENTIFICATION NUMBER..... N01 DE92421-01
ORGANIZATION..... WESTAT, INC.
ADDRESS..... ROCKVILLE MARYLAND
INITIAL START DATE..... 04-15-79
EXPIRATION DATE..... 05-30-80
ORGANIZATION CODE..... 9611701
PROJECT DIRECTOR..... MCKENNA, THOMAS W
NIDR PROJECT OFFICER..... MILLER, ANN J.
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: SURVEY OF DENTAL CARIES PREVALENCE IN SCHOOL CHILDREN
THROUGHOUT THE US

OBJECTIVES AND WORK SCOPE :

Plan and conduct the gathering of data for a survey of the prevalence of dental caries among school aged children in the continental United States. Develop and utilize a probability sample according to NIDR specifications of children in grades Kindergarten through twelve (K-12). Conduct examinations for dental caries, gingivitis, and need for dental treatment on children in randomly selected classrooms; record their residence history; obtain and record the fluoride content of their drinking water; and provide these data to the NIDR. Examinations will be conducted during the 1979-1980 school year.

IDENTIFICATION NUMBER..... N01 DE92422
ORGANIZATION..... COLUMBIA UNIVERSITY
ADDRESS..... NEW YORK NEW YORK
INITIAL START DATE..... 09-27-79
EXPIRATION DATE..... 09-26-80
ORGANIZATION CODE..... 0000000
PROJECT DIRECTOR..... ELLISON, SOLON A
NIDR PROJECT OFFICER..... IKARI, NORMAN S.
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: DENTAL PLAQUE AND SALIVA FROM GASTRIC INTUBATED PATIENTS

OBJECTIVES AND WORK SCOPE :

Investigate a minimum of 25 gastric-intubated patients to perform detailed analysis of the microbiological, immunological, and biochemical constituents in dental plaque and saliva. Control subjects will be an equivalent number of age-matched volunteers who are staff, students, or patients at the Columbia-Presbyterian Medical Center. Samples will be taken from plaque which will be allowed to develop for four days after prophylaxis. Saliva samples will be collected after the initial cleaning prior to plaque accumulation.

IDENTIFICATION NUMBER..... N01 DE92423-00
ORGANIZATION..... MINNESOTA, UNIVERSITY OF
ADDRESS..... ST. PAUL MINNESOTA
INITIAL START DATE..... 09-29-79
EXPIRATION DATE..... 09-28-80
ORGANIZATION CODE..... 5365601
PROJECT DIRECTOR..... SINGER, LEON
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: MAINTENANCE OF A SPECIAL MOUSE COLONY FOR FLUORIDE RESEARCH

OBJECTIVES AND WORK SCOPE :

Maintain a special mouse colony for fluoride research for the purpose of providing animals to qualified investigators. The animals will live on a defined fluoride intake (high and low levels) for at least five years, or approximately ten generations.

IDENTIFICATION NUMBER..... Y01 DE40014-06
ORGANIZATION..... VETERANS ADMINISTRATION HOSPITAL
ADDRESS..... EAST ORANGE NEW JERSEY
INITIAL START DATE..... 01-01-74
EXPIRATION DATE..... 09-30-79
ORGANIZATION CODE..... 0481053
PROJECT DIRECTOR..... MASHBERG, ARTHUR
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: TECHNIQUES FOR EARLY DETECTION OF ORAL CARCINOMA

SALIENT RESULTS TO DATE:

Based on the last six months report 19 patients were added to the study group with asymptomatic oral cancer. In this group 13 lesions were found to be invasive and 6 were found to be in-situ. There are now a total of 94 asymptomatic carcinomas consisting of 75 invasive lesions and 19 in-situ lesions. During the last six months, 3 additional lesions were found to be dysplastic; this group now consists of 11 patients with 12 dysplastic lesions. In the past six months 271 non-oral cancer control patients have been selected and interviewed. Of this group 161 or 59.4% are heavy drinkers (drink 6 or more whiskey equivalents per day) as compared to the study population of oral cancer patients in which 91.8% are heavy drinkers. These early data suggest that it may be possible to separate out the significance of drinking in the oral cancer patients. Using the direct application of toluidine blue in the 19 new cases, has yielded only one false negative for a 5.3 false negative rate. In evaluating the toluidine blue mouth rinse versus the direct application of toluidine blue the results to date are that 42 of 43 lesions stained positively with application and 42 of 43 stained positively with the rinse. Of the 81 cancer cancer patients found since the prospective study began in 1974, 48 are still being followed closely; an additional 7 have been difficult to follow but attempts are being made to retrieve them to a regular scheduling pattern. To date the study has resulted in establishing 1) the identification criteria for asymptomatic oral carcinoma, 2) that a very high percent of these lesions are already invasive and 3) that over 90% of those with oral carcinoma are heavy drinkers.

IDENTIFICATION NUMBER..... Y01 DE40015-06
ORGANIZATION..... U.S. NATIONAL BUREAU OF STANDARDS
ADDRESS..... WASHINGTON DISTRICT OF COLUMBIA
INITIAL START DATE..... 07-01-73
EXPIRATION DATE..... 09-30-79
ORGANIZATION CODE..... 5644902
PROJECT DIRECTOR..... CASSEL, JAMES M
NIDR PROJECT OFFICER..... REESE, JOYCE A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: INTERACTIONS OF ORAL STRUCTURES & RESTORATIVE MATERIALS

SALIENT RESULTS TO DATE:

Collaboratively with the American Dental Association and the military dental service research is in progress to develop adhesive restorative dental materials, improve composite restorations and develop more effective techniques for use of base metal alloys in crown and bridge application. The basic approach to developing adhesion between restoration and tooth is to augment, where possible, the mechanical adhesion achievable with etching procedures and to evolve systems for chemical bonding to surfaces such as dentin where etching techniques are ineffective. Emphasis is placed on difunctional monomer systems which allow for copolymerization with resin matrix of the composite restoration as well as bonding to tooth surface. The approach to improved color and storage stability of composite restorative materials is to explore resin systems based on crystallizable monomers as a means of assuring reproducibly pure materials and to develop new and improved initiator systems for use with these and other monomer systems. The wear of a broad spectrum of dental materials induced by slide contact with human enamel pins is measured to provide the basis for development of a laboratory test for wear predictability. Characterization of dental alloys with special emphasis on base metal alloys is carried out and the techniques and mechanisms of bonding thereto veneering materials such as porcelain or polymeric systems are investigated.

IDENTIFICATION NUMBER.....	Y01 DE50019-04
ORGANIZATION.....	U.S. PUBLIC HLTH. SERVICE HOSP., SA
ADDRESS.....	SAN FRANCISCO CALIFORNIA
INITIAL START DATE.....	10-01-75
EXPIRATION DATE.....	09-30-79
ORGANIZATION CODE.....	0485411
PROJECT DIRECTOR.....	MOFFA, JOSEPH P
NIDR PROJECT OFFICER.....	VALEGA, THOMAS M
NIDR CONTRACT SPECIALIST.....	MULLEN, EDITH
TITLE: CLINICAL EVALUATION OF ANTERIOR & PROSTERIOR DENTAL RESTOR MATERIALS	

SALIENT RESULTS TO DATE:

1. Dental Amalgam Clinical Studies- They have placed, conducted baseline, first and second year recall evaluations on 266 units of 3 different alloys comparing unpolished and immediate polishing. In addition they have conducted first year evaluations on 454 units of 3 traditional alloys with a new high copper single composition alloy. 2. Composite Resin Clinical Study- In order to assess the claimed advantages of new "micro-filled" composites, a study was initiated during this past year to evaluate the performance of three of these composites in comparison to a conventional composite for the restoration of anterior teeth: 403 units were placed. 3. Base-Metal Alloy Clinical Study- the objective of this clinical study is to compare the clinical performance of a control gold-based alloy with that of two base-metal alloys one of which is a beryllium containing alloy. These alloys have been used to fabricate fixed partial dentures. During the period of this study 353 total units have been placed, baseline and three year recall evaluations have been performed. 4. Automation of Clinical Activities They have entered all of their previous demographic and clinical evaluation data which was collected during the past ten years into their WANG computer. They now have in their data file information on over 3,500 restorations, approximately 725 patients and 50 materials. During the past year they have continued their effort to up-grade the computer programs and increase the efficiency of the software facilities.

IDENTIFICATION NUMBER..... Y01 DE60020-04
ORGANIZATION..... U.S. DEPT. OF HEW, SAN FRANCISCO, C
ADDRESS..... SAN FRANCISCO CALIFORNIA
INITIAL START DATE..... 10-01-75
EXPIRATION DATE..... 02-28-79
ORGANIZATION CODE..... 0485454
PROJECT DIRECTOR..... LOUIE, REGINALD
NIDR PROJECT OFFICER..... FREW, RALPH A
NIDR CONTRACT SPECIALIST..... MULLEN, EDITH
TITLE: A COMMUNITY CARIES PREVENTION DEMONSTRATION PROGRAM THE
ISLAND OF GUAM

OBJECTIVES AND WORK SCOPE :

Briefly, the Contractor shall establish and conduct a school based caries prevention demonstration program; collect and report data on the cost and effectiveness of the program; and develop plans for continuation of the program after the expiration of Federal support. The preventive regimen shall consist of weekly fluoride mouthrinsing with 0.2% solution of sodium fluoride. Grades K-6 or K-8 will be treated. If K-6 are treated, K-9 will be examined each year. If K-8 are treated, K-11 will be examined. DMF tooth and surface data shall be determined with mirror and explore. Radiographs will not be used. Costs and staff time for implementing and conducting the project will be recorded. The Contractor shall also exert every effort to obtain funding from the community for continuation of the project for a period of three years after the Federal support has terminated.

SALIENT RESULTS TO DATE:

During the third year of the program 13, 479 children participated in the study, which was a participation rate of 92.2%. The data analysis showed reduction in DMFS scores for five out of six grades.

IDENTIFICATION NUMBER..... Y01 DE60025-04
ORGANIZATION..... U.S. ARMY INSTITUTE OF DENTAL RESEA
ADDRESS..... WASHINGTON DISTRICT OF COLUMBIA
INITIAL START DATE..... 08-16-76
EXPIRATION DATE..... 09-30-80
ORGANIZATION CODE..... 0484321
PROJECT DIRECTOR..... HAWLEY, CHARLES E.
NIDR PROJECT OFFICER..... MIZEL, STEVEN
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: LEUKOCYTE SUBPOPULATIONS FOR PRODUCTION OF OAF FACTOR & BONE
RESORPTION

SALIENT RESULTS TO DATE:

Systematic methodologies were established which show promise of isolating a relatively homogeneous fraction from supernatants of activated lymphoid cells which have "osteoclast activating factor" (OAF) activity. OAF activity has been generated in human mixed leukocyte reactions. Supernatants derived from such cultures have been concentrated and a stepwise purification procedure has been developed which employs molecular sieve chromatography, ion exchange chromatography and polyacrylamide gel electrophoresis. While no discernible protein bands appeared on the gels, the resolution and OAF activity was such that a considerable restricted band or bands of activity could be eluted from the polyacrylamide gel. Such a preparation could be used for immunization purposes and for testing to determine if other biological activities have been eliminated by this purification procedure.

IDENTIFICATION NUMBER..... Y01 DE80027-02
ORGANIZATION..... U.S. NATIONAL BUREAU OF STANDARDS
ADDRESS..... WASHINGTON DISTRICT OF COLUMBIA
INITIAL START DATE..... 10-01-77
EXPIRATION DATE..... 09-30-79
ORGANIZATION CODE..... 5644902
PROJECT DIRECTOR..... NEWBURY, DALE E.
NIDR PROJECT OFFICER..... CASCIANI, FRANCIS S.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: ELECTRON ION MICROPROBE INORGANIC ELEMENTS IN MINERALIZATION
OF DENTIN

SALIENT RESULTS TO DATE:

The laser Raman microprobe has been applied to the study of the mineralization process in enamel and bone. Studies have been carried out in tissues of rat incisor enamel and dentin and the embryonic chick tibia. Sections were prepared by cryotomy followed by air desiccation. In these two types of mineralizing tissue, two principal forms of phosphorous compounds have been identified: 1) an inorganic phase identified as calcium hydroxyapatite and 2) an organic phosphoprotein. The spatial distribution of these components has been determined with a lateral spatial resolution of 6-20 μ m from the mineralizing front to regions of higher mineralization. A possible carbonate phase, with a Raman spectrum similar to that of the mineral Huntite ($\text{CaMg}_3(\text{CO}_3)_4$), is found in association with regions of low mineral phosphate content.

The results of the Raman microprobe are being correlated with the results of the electron probe for the elemental analysis of the elements associated with these components.

IDENTIFICATION NUMBER..... Y01 DE90003-01
ORGANIZATION..... INDIAN HEALTH SERVICE, HSA, DHEW
ADDRESS..... SHIPROCK NEW MEXICO
INITIAL START DATE..... 07-01-79
EXPIRATION DATE..... 09-30-79
ORGANIZATION CODE..... 0485419
PROJECT DIRECTOR..... BECK, C. MICHAEL
NIDR PROJECT OFFICER..... NISWANDER, JERRY D.
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: LONG-TERM EVALUATION OF SERIAL EXTRACTION IN NAVAJO CHILDREN

OBJECTIVES AND WORK SCOPE:

This 3-month Agreement is for Phase I of a bi-phasic 18-month effort to assess the long-term results of serial extraction carried out in a Navajo population 10-12 years ago. Phase I is limited to the inventory and catalog of existing records and determination of subject availability. Based upon a review of the completeness of existing records and availability of subjects, the conduct of Phase II will be considered.

IDENTIFICATION NUMBER..... N01 AI52530-05
ORGANIZATION..... BETH ISRAEL HOSPITAL
ADDRESS..... BOSTON MASSACHUSETTS
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 06-30-80
ORGANIZATION CODE..... 0000000
PROJECT DIRECTOR..... FREEDBERG, IRWIN M
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: THERAPY OF CUTANEOUS HERPES SIMPLEX IN NORMAL & COMPRISED
HOSTS

OBJECTIVES AND WORK SCOPE:

The Contractor will conduct studies to better define the natural history of facial mucocutaneous herpesvirus hominis infections and to determine the safety and estimate the efficacy of monophosphate adenine arabinoside and disodium phosphonacetate herpesvirus hominis infections. The work will be done in two phases.

IDENTIFICATION NUMBER..... N01 AI52532-05
ORGANIZATION..... UTAH, UNIVERSITY OF
ADDRESS..... SALT LAKE CITY UTAH
INITIAL START DATE..... 06-30-75
EXPIRATION DATE..... 06-30-80
ORGANIZATION CODE..... 0514002
PROJECT DIRECTOR..... OVERALL, JAMES C
NIDR PROJECT OFFICER..... FRAZIER, PAUL D
NIDR CONTRACT SPECIALIST..... BLEVINS, MARION
TITLE: STUDY OF RECURRENT MUCOCUTANEOUS HERPESVIRUS HOMINIS
INFECTION

OBJECTIVES AND WORK SCOPE:

The Contractor will conduct studies to better define the natural history of facial mucocutaneous herpesvirus hominis infections and to determine the safety and estimate the efficacy of monophosphate adenine arabinoside and disodium phosphonacetate herpesvirus hominis infections. The work will be done in two phases.

IDENTIFICATION NUMBER..... N01 CB53890-02
ORGANIZATION..... DUKE UNIVERSITY
ADDRESS..... DURHAM NORTH CAROLINA
INITIAL START DATE..... 04-01-75
EXPIRATION DATE..... 03-31-79
ORGANIZATION CODE..... 2221101
PROJECT DIRECTOR..... JOHNSON, ARMEAD H.
NIDR PROJECT OFFICER..... CHUSED, THOMAS M.
NIDR CONTRACT SPECIALIST..... KELLEY, GARY
TITLE: NCI HISTOCOMPATIBILITY TESTING CENTER

OBJECTIVES AND WORK SCOPE:

Sjogren's syndrome is the first autoimmune disease for which it has been shown that specific immune response genes play a controlling role. We have determined the B cell type of 24 Sjogren's syndrome patients. We have found that all of the patients carried two distinct B cell antigens compared to 37 and 24% of normal controls. These antigens appear to be the cellular expression of immune response genes. We now need to study patients' families to ascertain the pattern of inheritance of these genes and determine whether they are homozygous or heterozygous.

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