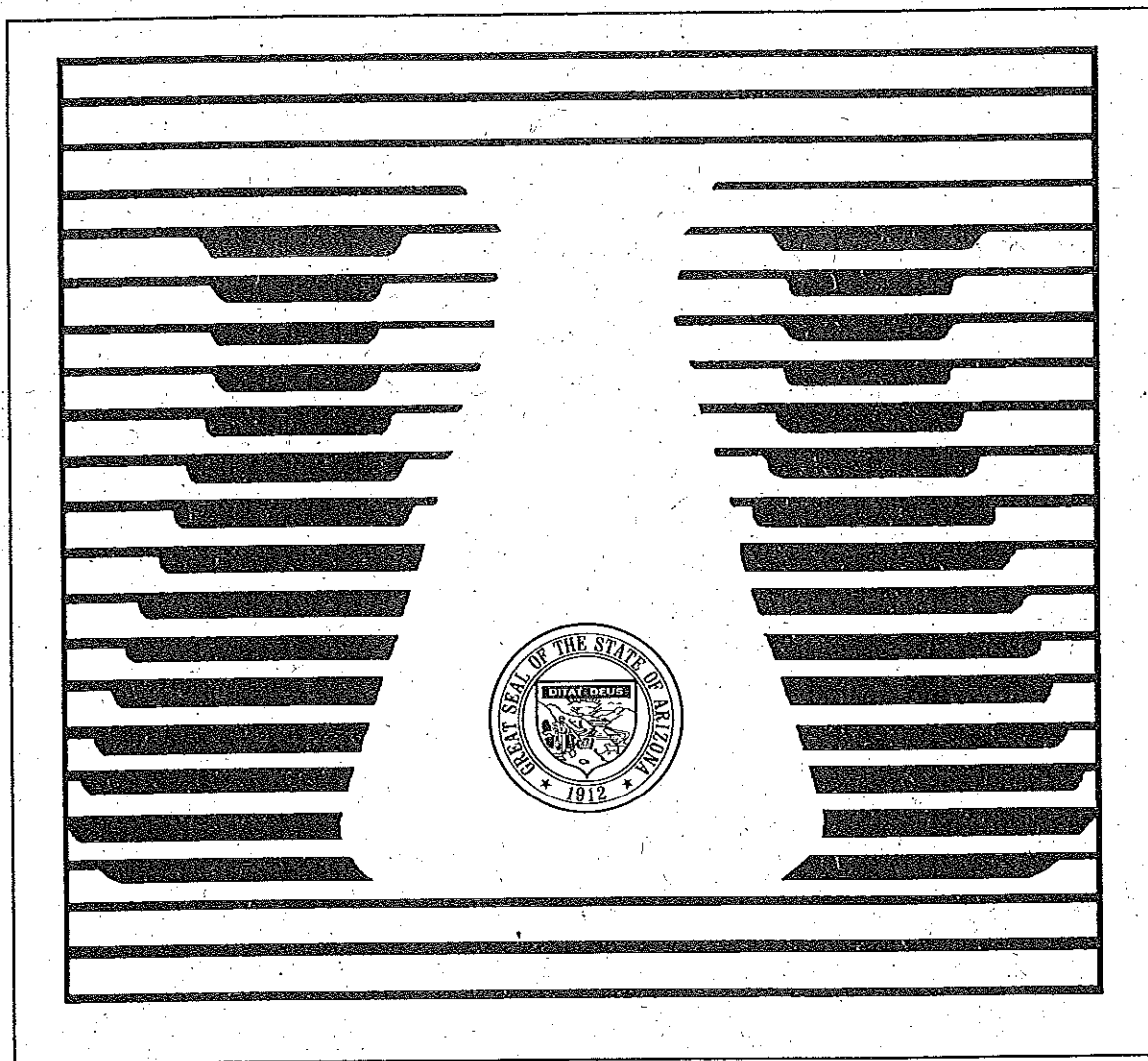


The Arizona Disease Control
Research Commission

ANNUAL REPORT



1994-95

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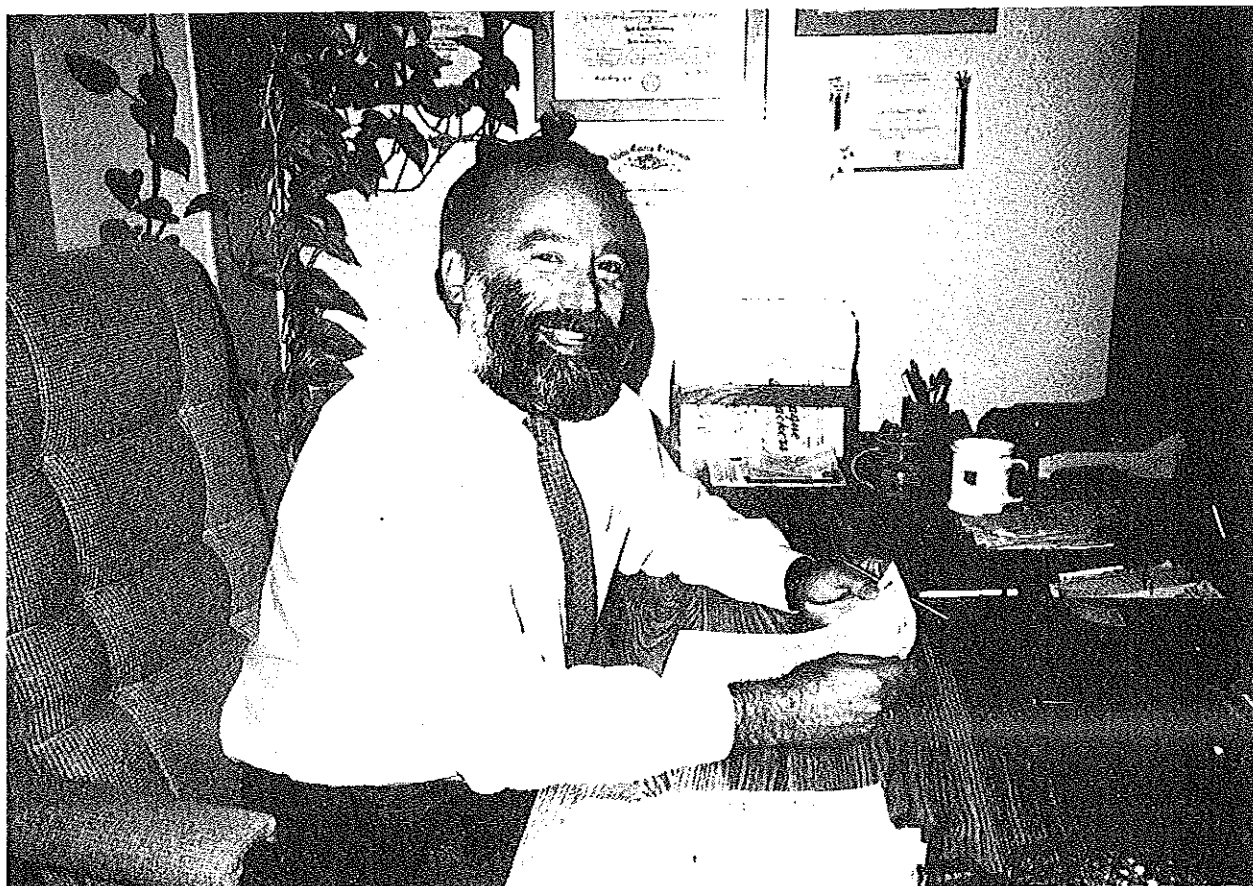
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Message from the Chairman

As Chairman of the Arizona Disease Control Research Commission (ADCRC), I am pleased to forward this agency's report on its contributions to improving the health of Arizonans through funding essential scientific research. Established by the Arizona Legislature in 1984 to support research on the cause, epidemiology, diagnosis, treatment and prevention of diseases affecting Arizonans, the ADCRC is empowered to direct public funds to basic research on a wide range of medical and public health concerns. Funding comes through the legislative appropriations process.

In November, 1994, the voters passed a Tobacco Tax Initiative. The ADCRC receives five percent of the revenues collected from the tax to fund tobacco related medical research. The first recipients of these funds were selected in June of 1995. The past year has been one of transition as appropriated funds were reduced and Tobacco Tax Revenues were added.

The Annual Report is prepared and submitted in January of each year to the Governor, the President of the Senate and the Speaker of the House of Representatives. We appreciate their continued support.

The Commission Members

Nine Commissioners guide the work of the Arizona Disease Control Research Commission. They are appointed by the Governor and confirmed by the Senate. Three members represent the General Public, three the Medical Community and three the Scientific Research Community. Commissioners are appointed for three year terms, and may be reappointed. The terms of three members expire each year. The Director of the Department of Health Services serves as Chairman of the Commission and *ex-officio* member. The Chairman and Commissioners who served during 1994-95 are presented below.

Jack Dillenberg, D.D.S., M.P.H.
Director
Arizona Department of Health Services

Chairman Dillenberg was appointed Director of the Arizona Department of Health Services by Governor Fife Symington in late August 1993. Dr. Dillenberg began with the ADHS in 1986 when he became Chief of the Office of Dental Health. In 1991, he became Assistant Director for Community and Family Health Services, where he served until appointed ADHS Acting Director on March 12, 1993. Chairman Dillenberg is a graduate of Tulane University and earned his D.D.S. degree at New York University and his Masters in Public Health from the Harvard School of Public Health, where he was honored as recipient of the 1993 Alumni Award of Merit in recognition of his major contributions to public health.



General Public

Barbara McConnell Barrett, J.D.

Paradise Valley

Commissioner Barrett is an international business and aviation expert. Vice Chairman of the United States Civil Aeronautics Board at age 32, she was the youngest appointee in the Board's history. Later she served as the Deputy Administrator of the Federal Aviation Administration. She currently serves on the Executive Committee of the American Management Association in New York and is a trustee of Thunderbird, The American Graduate School of International Management and of Embry-Riddle Aeronautical University. A pilot, Commissioner Barrett received her J.D. and M.P.A. degrees from Arizona State University. She was appointed to the Commission in April of 1992 by Governor Symington. Her term expires in May of 1995.



Lois Emden, M.S.

Nutritional Counselor

Paradise Valley

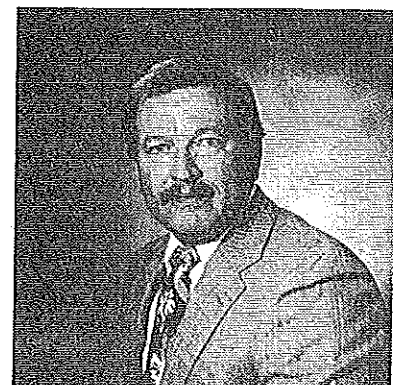
Commissioner Emden received her B.A. in 1963 and M.S. in Education from Hofstra University in 1967. She is an active participant in the Cancer Awareness Programs sponsored by the Arizona Cancer Center, is active in the Kiva School Art Masterpiece Program and is a Phoenix Art Museum Docent. Commissioner Emden was appointed by Governor Symington in 1994 and her term will expire in May of 1997.



Frank Hidalgo

Assistant Vice President, Institutional Advancement
Arizona State University

Commissioner Hidalgo has been Assistant Vice President for University Relations at Arizona State University since 1986. He served as Executive Director of the Governor's Council on Employment and Training in 1983. Commissioner Hidalgo received his B.A. in Education in 1964 from Arizona State University. He has served as a board member on numerous organizations, including Chicanos por la Causa and the Hispanic Women's Foundation. Commissioner Hidalgo was originally appointed to the Commission in 1991 and reappointed in 1993 by Governor Symington. His term expires in May of 1997.

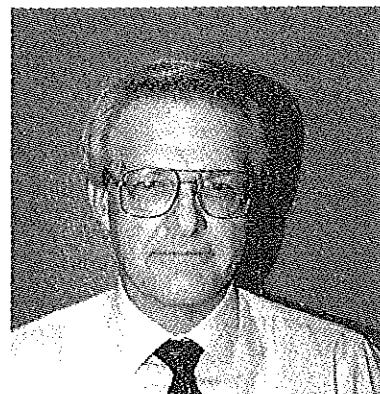


Medical Community

James R. Bloedel, Ph.D., M.D.

Chairman, Division of Neurobiology,
Barrow Neurological Institute,
St. Joseph's Hospital and Medical Center

Commissioner Bloedel has chaired the Division of Neurobiology at the Barrow Neurological Institute in Phoenix since 1984. Before joining Barrow Neurological Institute, he was Professor of Neurosurgery and Physiology at the University of Minnesota. Commissioner Bloedel received his doctorates from the University of Minnesota in 1967 and 1969. He received his bachelor's degree (summa cum laude) from St. Olaf College in 1962 where he was awarded Phi Beta Kappa and Blue Key honors. The author of many publications in the field of neurobiology, he received the Jacob Javits Award in 1986. Commissioner Bloedel was appointed to the Commission in 1992. In May of 1994, he was reassigned to the Scientific Research Community and his term expires in 1996.



Carlos R. Gonzales, M.D.

Family Practice
Patagonia

Commissioner Gonzales graduated in 1977 from Carleton College in Northfield, Minnesota and received his M.D. from the University of Arizona, College of Medicine in 1981. Commissioner Gonzales completed his Family Practice Residency in 1984 at the University of New Mexico Hospital in Albuquerque. He completed a fellowship in Adolescent Medicine and School Health in 1985. Commissioner Gonzales served as Medical Director for El Rio Neighborhood Health Center from 1988 to 1993. Commissioner Gonzales is a family practice physician in Patagonia, Arizona. He was appointed by Governor Symington and his term expires in 1996.



John E. Oakley, M.D.

Family Practice
Prescott

Commissioner Oakley received his A.B. from Washington University, St. Louis, and an M.D. from the University of Missouri, College of Medicine. He completed a rotating internship and four year residency in General Surgery at St. Louis County Hospital. A member of the Arizona Medical Association for 33 years, Commissioner Oakley has also served as President and Vice President. For 15 years he was a preceptor professor for the University of Arizona, College of Medicine. Commissioner Oakley has practiced general medicine and surgery in Prescott since 1962. Commissioner Oakley was appointed by Governor Symington and his term expires in May 1997.

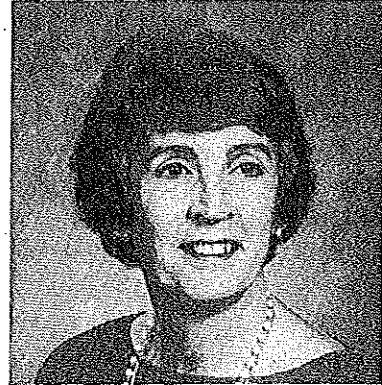


Scientific Research Community

Patricia D. Moore, Dr.P.H., R.N.

Chair, Division of Community Health Nursing
Arizona State University

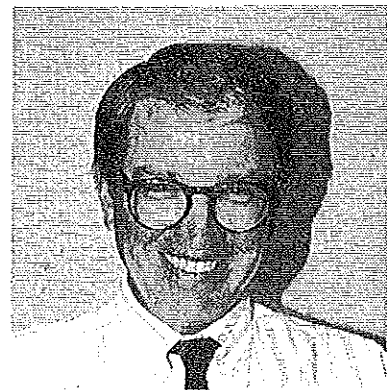
Commissioner Moore received her Doctorate and Master's degrees in Public Health from the Johns Hopkins University School of Hygiene and Public Health and a Master's degree in Nursing from the Catholic University of America. Commissioner Moore is an Associate Professor and Chair of the Division of Community Health Nursing, Arizona State University. She is a Fellow of the American Academy of Nursing. Appointed to the Commission by Governor Symington in 1993, Commissioner Moore was reassigned to the Medical Community in May of 1994 and her term expires in 1995.



David J. Prior, Ph.D.

Chairman, Department of Biological Sciences
Dean, College of Arts and Sciences
Northern Arizona University

Commissioner Prior was Professor and Chairman of the Department of Biological Sciences at Northern Arizona University from 1987 to 1992 and was appointed Dean of the College of Arts and Sciences in 1992. Commissioner Prior received his doctorate in neurophysiology in 1972 from the University of Virginia. The author of numerous publications in neurophysiology, he was appointed to the Commission in 1992 by Governor Symington. Commissioner Prior's term expires in 1995.



Walter Williams, Ph.D., M.D.

Associate Professor, Department of Radiology
University of Arizona

Commissioner Williams received his Ph.D. in Physical Chemistry from Purdue University in 1968 and his M.D. from Yale University in 1980. Commissioner Williams was a member of the Science Team for the Voyager Spacecraft Missions to Jupiter and Saturn and was a Senior Scientist at the Jet Propulsion Laboratory, California Institute of Technology prior to returning to school to complete his medical studies. Commissioner Williams is an experienced teacher and researcher. He has authored numerous publications in the areas of physics and medicine. Commissioner Williams was appointed by Governor Symington and his term expires in May, 1997.



Summary of 1994-95 Commission Activities

The Commission had 72 contracts with medical and health researchers in Arizona as of July, 1994. Contract summaries are contained in Section A.

Approximately 1300 Requests for Proposals (RFPs) for 1994-95 awards were mailed to potential applicants in August 1994. The amount available for new contract awards was just under \$880,000. In response to the RFP, the Commission received 80 proposals by October 18, 1994. Section B summarizes the research proposals received.

In late November and early December the proposals were sent to a panel of national scientific and medical experts for peer review and evaluation. In January and February, the Commission received approximately 240 proposal evaluations prepared by more than 100 out-of-state peer reviewers. Three reviews were received for each proposal. The proposals and evaluations were distributed to the Commissioners who were formed into three, three-person subcommittees to facilitate the final review process. In April the Commissioners selected 26 award-winning research projects from among the 80 applications submitted. The New Awards are listed in Section D. During 1995-96, the ADCRC will be managing 67 contracts.

Section A

Contracts for 1994-95

Cardiovascular and Other Circulatory Diseases/Disorders

Appleton	Mayo Clinic Scottsdale	Experimental Determinants of Transmitral and Pulmonary Venous Flow During Atrial Contraction	26400
Baldwin	University of Arizona	Does Stasis Affect Microvascular Surface Changes & Permeability?	24600
Burt	University of Arizona	Vascular Smooth Muscle Dysfunction Early in Atherogenesis	26399
Flink	University of Arizona	Characterization of Cellular Nucleic Acid Binding Protein	21250
Going	University of Arizona	Metabolism of High Density Lipoprotein Cholesterol in Postmenopausal Women	24515
Keller	St. Joseph's Hospital	Advancement of Magnetic Resonance Angiography Technology	24300
Kern	University of Arizona	Myocardial Dysfunction Following Resuscitation from Cardiac Arrest	24600
Markle	Northern Arizona University	Physiology of Enhanced Vascular Permeability in Diabetes	25000
McDonagh	University of Arizona	Reperfusion Injury in the Diabetic Heart	24600
McNamara	University of Arizona	Vitamin C & Cardiovascular Disease Risk	26378
Morkin	University of Arizona	Molecular Signals in Ventricular Remodeling	60000
Pemberton	University of Arizona	Development of New Anti-Inflammatory Electrically Conductive Biomaterials (Gold Alkanethiols & Organothiols) for Permanent Cardiac Pacemaking Applications	21250
Thomas	Arizona State University	Obesity, Fat Distribution and Health Behavior as Predictors of CHD Risk in Native American, Mexican American and Caucasian Women	26396

Health Effects of Environmental Pollutants

Boyer-Hassen	University of Arizona	Southern Arizona Childhood Lead Study	23100
Ulreich	University of Arizona	Immunotoxicology of Common Groundwater Contaminants in Arizona	44947

Health Promotion and Disease Prevention

Balcazar	Arizona State University	The Effects of Acculturation on Birth & Postnatal Outcomes Among Mexican American Women in Arizona	21011
Berg	Maricopa County	Immunization Action Plan Focus Groups	19932
Braun	University of Arizona	Understanding of Kidney Stone Formation with an Emphasis on the Formation of Uric Acid Containing Stones	26400
Buller	University of Arizona	Sunny Days: Healthy Ways: Evaluation of a Skin Cancer Prevention Curriculum	21242
Flores	University of Arizona	Fate of Dietary Carnitine During Development	24000
Garewal	University of Arizona	Antioxidant Vitamins for the Secondary Prevention of Cardiovascular Disease	26400
Harris	University of Arizona	Increasing Smoking Cessation Rates in Arizona: A Physician Based Program to Improve Efficacy: Effectiveness & Dissemination	20500
Leischow	University of Arizona	The Safety and Efficacy of Nicotine Patch for Smoking Cessation in a Self-Help Program	21250
Lobell	Maricopa Medical Center	Barriers to Cancer Prevention: Diagnosis & Treatment in Hispanic Men & Women	25000

McCloskey	University of Arizona	Family Violence & Substance Use in Hispanic & Anglo Youth	25953
Misra	Arizona State University	Novel Antibiotic Targets Among Bacterial Pathogens that Cause Urinary Tract Infections & Sexually Transmitted Diseases & the Role of the Outer Membrane in Antibiotic Resistance	24300
Roosa	AZ Family Planning Council	Relationship of Childhood Victimization to Teenage Pregnancy and Sexually Transmitted Diseases	61159
Shand	Northern Arizona University	Isolation and Characterization of Halocin Genes from Extremely Halophilic Archaeobacteria	19476
Taren	University of Arizona	Measurement of Food Intake in Arizona Populations	50074

Infectious and Immunologic Diseases/Disorders

Akporiaye	University of Arizona	Analysis of Tumor-Rejection Responses Using a Retrievable Matrix of Tumor Implantation	30000
Ampel	University of Arizona	Cytokine in Human Coccidioidomycosis	21596
DeLuca	University of Arizona	Use of <i>In Vitro</i> Chimeras to Study the Induction of Type I Diabetes	32500
Dodson	University of Arizona	Biochemical Characterization of the Helicase- Primase of Herpes Simplex Virus Type I	21247
Eklund	University of Arizona	DNA Fingerprinting in Bone Marrow Transplantation: HLA-PCR Fingerprinting Crossmatch in Organ Transplantation	22200
Grimes	University of Arizona	Peptides Bound to HLA and Human Disease	26013

Joens	University of Arizona	Campylobacteriosis: Cell Invasion & Its Relationship to Lesion Development in the Host	21600
Marchalonis	University of Arizona	Analysis of Synovial Tissue T-Cell Receptor Heterogeneity in a Clinical Subset of Rheumatoid Arthritis	65000
Posner	Northern Arizona University	Development of Strategies to Inhibit Allergic Responses	25831
Yeoman	University of Arizona	The Use of Human Umbilical Cord Blood for Allogeneic Bone Marrow Reconstitution & Transplantation	25000

Malignant Neoplasms

Gmitro	University of Arizona	Real-Time Magnetic Resonance Imaging	25000
Hoffmann	University of Arizona	Potential Antitumor Agents from Southwestern Plants	21250
McAleese	University of Arizona	Use of Scintigraphy in the Evaluation of Breast Tumors	20735
Moffet	St. Joseph's Hospital	Molecular Mechanisms of Altered Basic FGF Function in Human Malignant Astrocytoma	21234
Moore	Arizona State University	Carotomofluorophores: Imaging Agents for Diagnosis of Neoplastic Disease	25458
Parker	University of Arizona	Identification of Genes Regulating Eucaryotic Gene Expression by mRNA Deadenylation	21248
Pettit	Arizona State University	Discovery & Development of New Anticancer Drugs	215000
Powis	University of Arizona	Arizona Cancer Center Multidisciplinary Research Program	520214

Scheck	St. Joseph's Hospital	Identification of Genes Associated with BCNU Resistance in Human Malignant Gliomas	20571
Smith	Arizona State University	Regulation of Cell Cycle Control Genes by Interferons	21250
Weinert	University of Arizona	Checkpoint Genes & Genomic Instabilities	26396
Wilson	University of Arizona	Membrane Dynamics in Colon Carcinoma Cells	26136

Metabolic and Endocrine Disorders

Heidenreich	University of Arizona	Galactose-1-Phosphate Uridyltransferase Gene Regulation	29931
Kling	University of Arizona	Growth and Development Regulation of Erythropoietin Production	21150
Philipps	University of Arizona	Kinetics & Degradation of IGF	25000

Neurologic, Mental and Behavioral Diseases/Disorders

Caselli	Mayo Clinic Scottsdale	Kinematic Studies of Upper Limb Apraxia	21175
Johnson	University of Arizona	Effect of Alcohol & Phenobarbital Exposure on Neonatal Axonal & Dendritic Development	24000
Kappen	Mayo Clinic Scottsdale	Analysis of Transgenic Mice Expressing the Precursor Protein of Alzheimer's Disease β -Amyloid	26399
Kurth	St. Joseph's Hospital	Genomic Localization of the Cavernous Malformation Gene	21977
Lien	University of Arizona	Nuclear Magnetic Resonance (NMR) Study of Cell Volume Regulation in Cultured Brain Cells	25000

Montfort	University of Arizona	Microtubules and Associated Proteins	21250
Montgomery	University of Arizona	Pathophysiology of Parkinsonism	24900
Polt	University of Arizona	Crossing the Blood-Brain Barrier. Glycosylation of Neuro-Active Peptides to Produce Physiologically Active Drugs	21250
Stelmach	Arizona State University	The Locus of Bradykinesia in Parkinson's Disease	25000

Respiratory Disease

Bloom	University of Arizona	Development of a Recombinant Glucocorticoid Receptor with Constitutive Activity-Potential Therapy for Asthma	25868
Rider	University of Arizona	Pulmonary Surfactant Degradation in Newborn Rabbit Lung Lysosomes <i>In Vivo</i>	25000

Aging And Disease

Brachova	Sun Health Research	Functional Correlates of Complement Activation in Alzheimer's Disease	21250
Logan	VA Medical Center	Studies on the Mechanism of Renal Aging: The Role of Compensatory Hypertrophy	25000

Section B

Research Proposals Recieved for 1995-98

Research Proposals Received Listed Alphabetically

Adam	University of Arizona	Control of the Expression and Transport of a Variant Surface Protein of Giardia Lamblia	30000 30000 30000
Adam	University of Arizona	Is Giardiasis a Zoonosis? A Molecular Epidemiologic Solution to Identifying Modes of Transmission	30000 30000 30000
Adamowicz	University of Arizona	Molecular Modelling Study Thymidylate Synthase Inactivation	30000 30000 30000
Ahmad	University of Arizona	Molecular Mechanisms of the Transmission of HIV-1 from Mother to Infant	30000 30000 30000
Bacon	Arizona State University	The Influence of Hearing Aid Compression and its Relation to the Dynamic Range of Hearing	30000 29604 29765
Bice	St. Joseph's Hospital	18 FDG Single Photon Emission Computed Tomography (SPECT) Imaging of the Brain Disorders	28800 29153 29719
Borgs	University of Arizona	Continuous Gastric Infusion Model of Fetal Alcohol Syndrome: a Prototype for Controlled Study of Oral Environmental Pollutants in Birth Defects	24970 24970 24970
Bracha	St. Joseph's Hospital	Localization of Protein Synthesis-Dependent Plasticity in the Circuits Controlling the Classically Conditioned Reponse in the Rabbit	30000 30000 30000
Castaneda	Arizona State University	Analysis of the Use of Glial Cells as Carriers of Recombinant Genes to the Brain: A Potential Treatment for Parkinson's Disease	29734 29799 29010
Castro	Arizona State University	The Evaluation of Peer Health Worker Model: Is it Effective in Promoting Women's and Children's Preventive Health Care?	29938 29679

Chong	University of Arizona	San Simon School Needs Assessment	29994
Chow	University of Arizona	Effects of AIDS on Drug Metabolism in a Murine AIDS Model	29955 29906 29745
Clarke-Steffen	Arizona State University	Family Communication Regarding Pediatric Infectious Disease	19843
Coonrod	Maricopa Medical Center	Evaluation of a Screening Method to Detect Vaginal Infections Associated with Preterm Delivery	29278 29422
Craig	St. Joseph's Hospital	Effects of Vasopressin Lamina I STT Neurons	29700 29700
DeLuca	University of Arizona	Peptide Vaccine and Gene Therapy Approached to Diabetes Using a Novel <i>In Vitro</i> Model	30000 30000 30000
Drumm	St. Joseph's Hospital	Glycemia: Subarachnoid Hemorrhage and Neurobehavioral Outcome	23293 22440 5252
Eng	University of Arizona	Developing Protocols to Improve Outcomes for Diabetic Patient	29979 29987 29943
Erickson	University of Arizona	The Role of PAX 2 Alterations in Urogenital Birth Defects and Possible Relationship to Cigarette Smoke	28376 29651 30000
Espy	University of Arizona	Long-Term Outcome in Children Prenatally Exposed to Drugs	28706 28916 29915
French	University of Arizona	Marajuana and Brain Dopamine Reward Systems: Cellular Neurobiology	27429 28446 29504
Friedman	University of Arizona	Investigations on BAF; A New Transcriptional Regulator of Bordetella Pertussis	30000 30000 30000

Research Proposals Received for 1995-98

B-3

Gamble	University of Arizona	Aging and Nutritional Intervention	30000
			30000
			30000
Gamble	University of Arizona	Understanding the Health Culture of Arizona's Mexican-American Children	21579
			27280
			21962
Gerba	University of Arizona	Disease Surveillance and Water Quality Analysis of the Colorado River and its Tributaries in the Grand Canyon	91503
			92393
			95231
Gervay	University of Arizona	Bioprocessing of Flourinated Meningococcal Polysaccharides as Potential Vaccines Against Bacterial Meningitis	29940
			29935
			29933
Glass	University of Arizona	Selenium and Aids	30000
			30000
			30000
Gorman	Northern Arizona University	Glycosylation and its Role in Virus Glycoprotein Host Cell Interactions	29975
			29975
			29969
Graves Jr.	Arizona State University	Comparative Biology and Genetics of Aging II. Selection Studies	29700
			29730
			29728
Hallum	University of Arizona	Interventions to Modify Behavior in Heterosexual Adults with HIV Infection	28141
			29070
			29937
Hamilton	University of Arizona	A New Model of Parkinson Pathophysiology - Human Neuronal Recordings	31018
			31897
			32941
Heimark	University of Arizona	Pericyte Loss in Diabetic Retinopathy	29707
			30220
			31516
Hoffman	Arizona State University	Nervous Systems Involvement in Autoimmunity	30000
			30000
			30000

J. Lai	University of Arizona	The Structural and Functional Analysis of Kappa Opioid Receptor by Mutagenesis	27596 28470 29510
Jacobs	Arizona State University	Regulation of Programmed Cell Death in Human Cancer Cells	30000 30000 30000
Joy	St. Joseph's Hospital	Function of Nuclear Basic Fibroblast Growth Factor and Fibroblast Growth Receptor in Human Cells of Astrocytic Lineage	29658 29945 29717
Kaufmann	University of Arizona	Special Education Interventions for Children with Cancer	29926 29552 29953
Kay	University of Arizona	Aging Antigen and Band 3 in Brain Aging and Alzheimer's Disease	115700 119522 124060
Koldovsky	University of Arizona	Gastrointestinal Metabolism of Milk-Borne Growth Factors in the Human Neonate	28574 30179 31951
Lai	University of Arizona	Screening for Uniparental Disomy in Patients with Unexplained Congenital Defects	30000 30000 30000
Lam	University of Arizona	Identification of Peptide Substrates and Development of Specific Inhibitors for p210bcr-abl Protein Tyrosine Kinase	29920 29920 29920
Larkey	University of Arizona	Second Line of Defense Against Cancer: Identifying Factors Influencing Healthcare Use/Nonuse Among Hispanics in Arizona	29300 29754
Lax	University of Arizona	Alterations in the Gene Expression for Sarcoplasmic Reticulum Calcium ATPase in Dilated Cardiomyopathy	27737
Lee	Mayo Clinic Scottsdale	Transgenic Mouse Models of Asthma and Other Inflammatory Diseases	30000 30000 30000

Research Proposals Received for 1995-98

B-5

Lien	University of Arizona	Kidney-Targeted Gene Therapy: Carbonic Anhydrase II Deficient Mice as a Model	30000
			30000
			30000
Lorton	Sun Health Research	Neuroimmune Involvement in the Progression of Experimental Arthritis	29677
			29969
			29657
Lue	Sun Health Research	Brain Cell Cultures from Rapid Alzheimer's and Control Autopsies	30000
			30000
			30000
Lukas	St. Joseph's Hospital	Genetic Engineering of Nicotine Acetylcholine Receptors	30000
			30000
			30000
Lynch	University of Arizona	Activation of Insulin Secreting Cells by Glucose	29902
			29968
			30000
M. Fernandez	University of Arizona	Regulation of VLDL Metabolism by Dietary Fiber	29700
			29700
M. Fernandez	University of Arizona	Pyridoxine (vitamin B-6) Treatment for Hyperbaric Oxygen Toxicity	29992
			25794
Manseau	University of Arizona	Analysis of Mutants that Affect the Cytoskeleton	29901
			29901
			29901
Martin	University of Arizona	New Antitubercular Agents: Prodrugs and Isoteres of Isoniazid and Pyrazinamide	29470
			28525
			29405
Massia	University of Arizona	Underlying Mechanisms for Tenascin-Stimulated Smooth Muscle Cell Migration in Response to Vascular Injury	27995
			28997
			29531
Mateika	University of Arizona	The Effect of Snoring on Cardiovascular Function During Non Rapid Eye Movement Sleep	30000
			30000
Misra	Arizona State University	Analysis of To1C α Protein Involved in Toxin Secretion and Membrane Permeability of Pathogenic Bacteria	22165
			23928

Morkin	University of Arizona	Actions of Diiodothyropropionic Acid in Heart	91785
		Failure: Pharmacology and Cardiac Biochemistry	94054
			97628
Nelson	University of Arizona	Functional and Clinical Evaluation of the p16 Protein in Melanoma	29361
			29361
			29361
Nolan Jr.	University of Arizona	The Effects of Colestipol on the Pharmacokinetics on Amiodarone	29942
			29961
Olson	Nova Care	Quantifying Functional Dysphagia Outcomes in Arizona Skilled Nursing Facilities	12878
			10666
Payne	University of Arizona	Evaluation of a Novel Biomarker for Individuals at Risk for Colon Cancer: Resistance to Apoptosis	30000
			30000
			30000
Robinson Jr.	St. Joseph's Hospital	Establishment of a Reversible Focal Ischemia Model	29461
Rogulski	University of Arizona	Interactive Three-Dimensional Display for Evaluation of Coronary Artery Disease	29954
			29785
			29800
Santosham	Johns Hopkins University	Immunization of Non-Pregnant Women with Pneumococcal and Hemophilus Influenzae Type B Vaccines	37428
Schram	University of Arizona	Anti-HIV Compounds in Arizona Plants	30000
			30000
			30000
Sell	Arizona State University	Genomic Localization of a Diabetes Susceptibility Gene	27980
			28901
			29999
Selleck	University of Arizona	Functional Comparison of the Drosophila Gene Division Abnormally Delayed to its Vertebrate Homologs and Analysis of their Role in Controlling Cell Division	30000
			30000
			30000
Slepian	University of Arizona	The Role of Beta-3 Integrin Expression in Arterial Smooth Muscle Cell Migration Following Injury	29645
			29547
			29530

Research Proposals Received for 1995-98

B-7

Smith	St. Joseph's Hospital	A Pilot Study of Intravascular EEG Recording Electrodes	28362
Stopeck	University of Arizona	Genetically-Modified Endothelial Cells in Vascular Biology	28424
			28294
			29505
Thurber	Arizona State University	The Relationship of Age, Ethnicity, Self-Perceived Personal Competence, Self-Care Activities and Temperament to Physiological and Adjustment Outcomes in Children with Asthma	29910
Valencia	El Rio Health Center	El Rio Diabetes Research Project	140615
			142675
			148108
Wang	University of Arizona	Apolipoprotein A-I Promoter: Functional Change in a Common Point Mutation	29729
			29729
Weber	University of Arizona	Validation of Diet and Physical Activity Measurements in Pima Indian Children	29880
			29538
Wijeweera	University of Arizona	Interactive Hepatotoxicity of Drinking Water and Ground Water Contaminants	29695
			29695
			29695
Wu	Mayo Clinic Scottsdale	Role of α -3 β -1 Integrin in Pericellular Matrix Assembly and Tumorigenicity	29999
			29999
			29999
Yamamura	University of Arizona	Determination of the Ligand Binding Domains of the Human Delta Opioid Receptor	29700
			29700
			29700
Yeoman	University of Arizona	<i>In Vitro</i> Organ Culture Approaches for Transplantation and Gene Therapy of Human Stem Cells	30000
			30000
			30000
Zabramski	St. Joseph's Hospital	Endovascular Treatment of Experimental Aneurysms	27363

Section C

Contracts for 1995-96

Cardiovascular and Other Circulatory Diseases and Disorders

Appleton	Mayo Clinic Scottsdale	Experimental Determinants of Transmitral and Pulmonary Venous Flow During Atrial Contraction	26400
Berg	University of Arizona	Evaluation of the Need for Ventilation During Cardiopulmonary Resuscitation in a Swine Cardiac Arrest Model	26400
Burt	University of Arizona	Vascular Smooth Muscle Dysfunction Early in Atherogenesis	26400
Flink	University of Arizona	Characterization of Cellular Nucleic Acid Binding Protein	21250
Going	University of Arizona	Metabolism of High Density Lipoprotein Cholesterol in Postmenopausal Women	24515
McNamara	University of Arizona	Vitamin C and Cardiovascular Disease Risk	26378

Health Effects of Environmental Pollutants

Ulreich	University of Arizona	Immunotoxicology of Common Groundwater Contaminants in Arizona	44947
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Health Promotion and Disease Prevention

Balcazar	Arizona State University	The Effect of Acculturation on Birth and Postnatal Outcomes Among Mexican American Women in Arizona	16130
Braun	University of Arizona	Understanding Kidney Stone Formation with an Emphasis on the Formation of Uric Acid Containing Stones	26400

Flores	University of Arizona	Dietary Carnitine in Gastrointestinal Metabolism During Development	22879
Garewal	University of Arizona	Antioxidant Vitamins for the Secondary Prevention of Cardiovascular Disease	26400
Leischow	University of Arizona	The Safety and Efficacy of Nicotine Patch for Smoking Cessation in a Self-Help Program	21250
McCloskey	University of Arizona	Family Violence and Substance Use in Hispanic and Anglo Youth	27407
Shand	Northern Arizona University	Isolation and Characterization of Halocin Genes from Extremely Halophilic Archaeobacteria	19476

Infectious and Immunologic Diseases and Disorders

Ampel	University of Arizona	Cytokine in Human Coccidioidomycosis	21596
Dodson	University of Arizona	Biochemical Characterization of the Helicase-Primase of Herpes Simplex Virus Type 1	21247
Grimes	University of Arizona	Peptides Bound to HLA and Human Disease	26013
Marchalonis	University of Arizona	Analysis of Autoantibodies to T-Cell Receptors in Rheumatoid Arthritis	107229
Posner	Northern Arizona University	Development of Strategies to Inhibit Allergic Responses	26210

Malignant Neoplasms

Akporiaye	University of Arizona	Analysis of Tumor-Rejection Responses Using a Retrievable Matrix of Tumor Implantation	30000
Hoffman	University of Arizona	Potential Antitumor Agents from Southwestern Plants	21250
Moffet	St. Joseph's Hospital	Molecular Mechanisms of Altered Basic FGF Function in Human Malignant Astrocytoma	20679
Moore	Arizona State University	Carotomofluorophores: Imaging Agents for Diagnosis of Neoplastic Disease	25692
Parker	University of Arizona	Identification of Genes Regulating Eucaryotic Gene Expression by mRNA Deadenylation	21248
Pettit	Arizona State University	Discovery and Development of New Anticancer Drugs	241875
Powis	University of Arizona	Arizona Cancer Center Multidisciplinary Research Program	598982
Scheck	St. Joseph's Hospital	Identification of Genes Associated with BCNU Resistance in Human Malignant Gliomas	21148
Smith	Arizona State University	Regulation of Cell Cycle Control Genes by Interferons	21250
Weinert	University of Arizona	Checkpoint Genes and Genomic Instabilities	26396
Wilson	University of Arizona	Membrane Dynamics in Colon Carcinoma Cells	26151

Metabolic and Endocrine Disorders

Heidenreich	University of Arizona	Galactose-1-Phosphate Uridyltransferase Gene Regulation	29931
Kling	University of Arizona	Growth and Development Regulation of Erythropoietin Production	21150

Neurologic, Mental and Behavioral Diseases and Disorders

Johnson	University of Arizona	Anticonvulsant (Phenobarbital) Effects on the Developing Nervous System: An <i>In Vitro</i> Model	19543
Kappen	Mayo Clinic Scottsdale	Analysis of Transgenic Mice Expressing the Precursor Protein of Alzheimer's Disease β -Amyloid	26392
Kurth	St. Joseph's Hospital	Genomic Localization of the Cavernous Malformation Gene	21967
Montfort	University of Arizona	Microtubules and Associated Proteins	21250
Polt	University of Arizona	Crossing the Blood-Brain Barrier. Glycosylation of Neuro-Active Peptides to Produce Physiologically Active Drugs	21250
Caselli	Mayo Clinic Scottsdale	Kinematic Studies of Upper Limb Apraxia	21175

Respiratory Disease

Bloom	University of Arizona	Development of a Recombinant Glucocorticoid Receptor with Constitutive Activity-Potential Therapy for Asthma	25649
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Rider	University of Arizona	Pulmonary Surfactant Degradation in Newborn Rabbit Lung Lysosomes <i>InVitro</i>	24050
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Aging and Disease

Brachova	Sun Health Research Institute	Functional Correlates of Complement Activation in Alzheimer's Disease	21250
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Section D

New Tobacco Awards

Cancer

Heimark	University of Arizona	Smoking and Pericytes: Their Roles in Angiogenesis	29707
Jacobs	Arizona State University	Regulation of Programmed Cell Death in Human Cancer Cells	30000
Nelson	University of Arizona	Functional and Clinical Evaluation of the p-16 Protein in Melanoma and Human Lung Cancers	29361
Payne	University of Arizona	Evaluation of a Novel Biomarker for Individuals at Risk for Colon Cancer: Resistance to Apoptosis	30000
Yamamura	University of Arizona	Tobacco, Cancer Pain and Opioids: Determination of the Ligand Binding Domains of the Human Delta Opioid Receptor	29700

Cardiovascular, Cerebrovascular and Peripheral Diseases/ Disorders

Drumm	St. Joseph's Hospital	Glycemia, Subarachnoid Hemorrhage, Neurobehavioral Outcome in Smokers, Passive Smokers and Nonsmokers	24793
Fernandez	University of Arizona	Cardiovascular Disease Risk Reduction by Dietary Fiber	29700
Gamble	University of Arizona	Aging, Free Radical and Nutritional Intervention	30000
Massia	University of Arizona	Underlying Mechanisms for Tenascin-Stimulated Smooth Muscle Cell Migration in Response to Vascular Injury	27995
Morkin	University of Arizona	Actions of Diiodothyropropionic Acid in Heart Failure: Pharmacology and Cardiac Biochemistry	91785
Rogulski	University of Arizona	Interactive Three-Dimensional Display for Evaluation of Coronary Artery Disease	29954

Slepian	University of Arizona	The Role of Beta-3 Integrin Expression in Arterial Smooth Muscle Cell Migration Following Injury	29645
Stoepck	University of Arizona	Genetically-Modified Endothelial Cells in Vascular Biology	28424
Wang	University of Arizona	Apolipoprotein A-I Gene Promoter: Functional Change in a Common Point Mutation	29729

Genetic Markers for Susceptibility to Tobacco Related Diseases

Larkey	Arizona Dept. of Health Services	Curbing the Trend of Tobacco Related Cancer Deaths: Identifying Factors Influencing Late Presentation of Symptomatic Hispanics	29300
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Nicotine Dependence

French	University of Arizona	Marijuana, Nicotine and Dopamine Reward Systems: A Unifying Hypothesis of Dependence	27429
Lukas	St. Joseph's Hospital	Genetic Engineering of Receptors for Nicotine	30000
Lynch	University of Arizona	Regulation of Insulin Secretion from Individual Beta Cells	29902

Respiratory Diseases

Lee	Mayo Clinic Scottsdale	Transgenic Mouse Models of Asthma and Other Inflammatory Diseases	30000
Lien	University of Arizona	Gene Therapy in Carbonic Anhydrase II Deficient Mice: Role of Carbonic Anhydrase in CO ₂ Exchange and Acid-Base Homeostasis	30000

Martin	University of Arizona	New Antitubercular Agents: Prodrugs and Isosteres of Isoniazid and Pyrazinamide	29470
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Reproductive and Developmental Effects of Tobacco Use and Tobacco Smoke Exposure

Ahmad	University of Arizona	Influence of Tobacco Smoking on the Molecular Mechanisms of HIV-1 Transmission from Mother to Infant	30000
Castro	Arizona State University	The Evaluation of a Peer Health Worker Model: Is it Effective in Preventing Cigarette Smoking in Promoting Women's and Children's Prevention Health Care	29938

Other Tobacco Related Diseases

Galgiani	University of Arizona	Structure of a Protein Antigen from Cryptococcus Neoformans	30000
Graves	ASU West	Comparative Genetics and Biology of Aging II. Selection Studies and Resistance to Toxic Compounds	29700
Lorton	Sun Health Research Institute	Neuromine Involvement in the Progression of Experimental Arthritis	29677