

T C O M

research notes

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APPLICATIONS SUBMITTED FOR FUNDING

06/88 - 08/88

ROBERT W. GRACY, PH.D. (Biochemistry) "Development and use of a skin equivalent system for study of cellular and molecular aspects of aging" Johnson & Johnson Baby Products - Open \$75,240.

VICTORIA RUDICK, PH.D. (Anatomy) "Targeted protein secretion in polarized epithelial cells" NIH AREA Program (collaborative with TWU) - 3 years \$4,730.

ROBERT WORDINGER, PH.D. (Anatomy) "Cell biology of intrusive implantation" NIH AREA Program - 2 years \$72,205.

BEN G. HARRIS, PH.D. (Biochemistry) "Regulation of metabolism in parasitic helminths" NIAID - 5 years \$838,122.

ANDRAS G. LACKO, PH.D. (Biochemistry) "Mechanism of action of LCAT" NHLBI (collaborative with KCOM) - 4 years \$718,589.

ANDRAS G. LACKO, PH.D. (Biochemistry) "Lipoprotein substrates of LCAT" AHA National - 3 years \$92,175.

THOMAS YORIO, PH.D. (Pharmacology) "Alpha₂-adrenoreceptors and acidification in renal epithelia" AHA National - 3 years \$90,122.

HARBANS LAL, PH.D. (Pharmacology) "Characterization of ethanol withdrawal" NIAAA - 4 years \$716,662.

JOSEPH WILSON, PH.D. (Physiology) "New approach to thromboresistant polymers" AHA National - 3 years \$90,000.

ELAINE L. JACOBSON, PH.D. (Medicine) "Posttranslational modification of proteins by ADP-ribose" NIH - 5 years \$768,823.

PATRICIA GWIRTZ, PH.D. (Physiology) "Adrenergic limitation to coronary flow during exercise" AHA National - 3 years \$90,000.

DAVID COX, PH.D. (Microbiology/Immunology) "Tissue culture/genetics studies of Treponema pallidum" NIAID - 3 years \$372,530.

STEVE FEDORKO, PH.D. (Medicine) "Role of the medical college in community-based AIDS prevention" Robert Wood Johnson Foundation - 2 years \$243,234.

JOHN CHAPMAN, D.O. (OB/Gyn) "Comparative randomized study of norgestimate triphasic and triphasil" Ortho Pharmaceuticals Corp. - 2 years 15,360.

PETER RAVEN, PH.D. (Physiology) "Mechanisms of orthostatic intolerance following aerobic conditioning and deconditioning" NASA - 3 years \$233,617.

JAMES CAFFREY, PH.D. (Physiology) "Opiate/autonomic interactions in the circulatory system" NHLBI - RCDA (continuation) \$50,580.

BEN G. HARRIS, PH.D. (Biochemistry) "Control mechanisms in filarial energy metabolism" WHO (Tropical Disease Research) - 2 years \$98,334.

RICHARD J. SINCLAIR, PH.D. (Admissions) "Proposal to host the AACOM health careers opportunity program" 09/01/89 - 08/31/92 \$923,004.

EXTERNAL APPLICATIONS FUNDED

06/88 - 09/88

BARBARA BARRON, PH.D. (Physiology) "Opiate receptors in the myocardium" American Heart Association - Texas Affiliate - two year grant (07/01/88 - 06/30/89) \$27,495.

WILLIAM W. BARROW, PH.D. (Microbiology/Immunology) "Biosynthesis of mycobacterium avium surface antigens" American Foundation for AIDS Research 08/01/88 - 07/31/89 \$50,066.

ROBERT BOURDAGE, PH.D. (Anatomy) "Double helix II software" Odesta Corporation \$799.

MacINTOSH COMPUTER GROUP - ROBERT BOURDAGE, PH.D. (Anatomy) "The Doctoral Program" Apple Computer Corporation (06/17/88 - open) \$30,062.90.

JAMES CAFFREY, PH.D. (Physiology) "Opiate/autonomic interactions in the circulatory system" NHLBI-RO1 (09/01/88 - 08/31/89) \$46,314.

PATRICK CAMMARATA, PH.D. (Anatomy) "Effects of hyperglycemia and hypergalactosemia on bovine trabecular meshwork (TM) cell" ALCON Laboratories, Inc. \$5,000.

MICHAEL J. FORSTER, PH.D. (Pharmacology) "Immunologic correlates of memory decline" NIA (FIRST) third of five year award (07/01/88 - 06/30/89) \$87,244.

ROBERT W. GRACY, PH.D. (Biochemistry) "Molecular basis of impaired wound healing in aging" Texas Advanced Technology Program - two year grant (06/01/88 - 05/31/89) \$45,000.

CARL E. JONES, PH.D. (Physiology) "Visceral and musculoskeletal reflexes: effects on cardiac and coronary function" American Osteopathic Association (09/01/88 - 08/31/89) \$14,085.

JOHN D. LANE, PH.D. and MICHAEL EMMETT-OGLESBY, PH.D. (Pharmacology) "Neurobiology of tolerance and reinforcement of drugs of abuse - novel techniques" Texas Advanced Technology Program - two year grant (06/01/88 - 05/31/89) \$64,127.

NORMAN G. LIESKA, PH.D. (Anatomy) "Pharmacia fellowship" ISER (09/01/88 - 07/31/89) \$500.

EUGENE QUIST, PH.D. (Pharmacology) "Calcium flux regulation in the heart" Texas Advanced Technology Program - two year grant (06/01/88 - 05/31/89) \$34,835.

PETER B. RAVEN, PH.D. (Physiology) "Education of scientists in cardiovascular regulation" NHLBI-Training Grant (09/01/88 - 06/30/89; five years for a total of \$209,591) \$32,726.

PETER B. RAVEN, PH.D. (Physiology) "Role of hyperbaric oxygen therapy in the treatment of neurological and perfusion disorders" Tandy Corporation (08/01/88 - 07/31/89) \$31,833.

PETER B. RAVEN, PH.D. (Physiology) "American college of sports medicine, editor-in-chief journal" American College of Sports Medicine (08/01/88 - 07/31/89) \$32,398.

BERNARD R. RUBIN, D.O. (Medicine) "Study comparing the combination of imuran and methotrexate versus methotrexate and placebo versus imuran and placebo" Emmes Corporation (08/01/88 - 07/31/89) \$30,000.

BERNARD R. RUBIN, D.O. (Medicine) "Placebo controlled study of osteopathic manipulation in the treatment of fibrositis" American Osteopathic Association (09/01/88 - 08/31/89) \$15,929.

CRAIG W. SPELLMAN, PH.D. (Microbiology/Immunology) "Dermatological changes following UV irradiation" NCI last of three year award (08/01/88 - 06/30/89) \$85,830.

TEXAS RESEARCH ENHANCEMENT PROGRAM AWARDS ANNOUNCED

Awards have been announced of the funding of grants from the Texas Research Enhancement Funds (formerly known as Organized or Faculty Research). Twenty eight applications were received and reviewed by the Faculty Research Committee which is made up of faculty from both the basic and clinical science departments. Twenty six applications were approved and recommended for funding. However, due to the limited funds available only fifteen of the proposals could be funded. They are:

BARBARA BARRON, PH.D. (Physiology) "Opioid peptides and catecholamines localization in canine heart and secretion into plasma" \$3,000.

DAVID COX, PH.D. (Microbiology/Immunology) "In Vitro cultivation studies on Treponema pallidum" \$7,500.

EDWARD E. ELKO, PH.D. (Pharmacology) "Alpha₂ adrenergic receptor agonists and intraocular pressure" \$3,600.

MICHAEL J. FORSTER, PH.D. (Pharmacology) "Longitudinal analysis of rodent short-term memory during aging" \$3,999.

GREGORY FRIESS, D.O. and ELAINE L. JACOBSON, PH.D. (Medicine) "Effects of chemotherapy on lymphocyte NAD status" \$4,000.

JOHN F. GAUGL, PH.D. and PATRICIA A. GWIRTZ, PH.D. (Physiology) "Training and adrenergic control of skeletal muscle blood flow" \$3,000.

PATRICIA A. GWIRTZ, PH.D. (Physiology) "Adrenergic limitation of coronary flow during exercise" \$5,000.

FRED L. JACKSON, PH.D. (Anatomy) "Potential role of the integrin receptor in fibronectin and laminin stimulated hatching of mouse blastocysts in vitro" \$4,861.

PHYLLIS KUTSKY, PH.D. (Physiology) "Effects of cachectin on the vasculature: a role in shock?" \$5,000.

ANDRAS G. LACKO, PH.D. (Biochemistry) "Characterization of the active site of LCAT" \$5,000.

EDWARD L. ORR, PH.D. (Anatomy) "Choroidal mast cells as mediators of experimental autoimmune uveitis (EAU)" \$5,000.

FRANK PAPA, D.O. (Medical Education) "Expert system shells as problem-specific performance assessment instruments" \$3,500.

KONRAD C. RETZ, PH.D. (Pharmacology) "Role of autoimmunity in learning and memory performance" \$3,000.

GARY E. WISE, PH.D. (Anatomy) "Composition and function of granules in the dental follicle" \$5,000.

ROBERT J. WORDINGER, PH.D. (Anatomy) "Cellular aspects of intrusive implantation" \$4,000.

Applications are now being accepted until October 17, 1988 for Texas Research Enhancement grants to support research projects of NEW faculty members hired since JUNE 1, 1988. Pertinent information and application forms are available from the Research Office.

Applications are due by 5:00 P.M. on Monday, October 17, 1988.

NEW CHAIRMAN FOR MICROBIOLOGY/IMMUNOLOGY

Paul F. Cook, Ph.D. has been appointed the chairman of the Department of Microbiology/Immunology effective September 1, 1988. Dr. Cook joined the TCOM faculty as an Assistant Professor of Biochemistry in 1982. He had previously been a faculty member in the Biochemistry Department of Louisiana State University Medical Center at New Orleans. In 1986, Dr. Cook was promoted to the rank of Professor of Biochemistry. He was awarded an Alexander von Humboldt Research Fellowship in 1987 which allowed him to spend a year as a Visiting Professor at the Institute for Physiological Chemistry at the University of Wurzburg, West Germany.

Dr. Cook has active teaching and research programs. In research, his studies are directed toward the determination of enzyme mechanism. This includes a determination of the order of addition of reactants to and release of products from enzyme, location of slow steps along the reaction pathway and a description of the chemical interconversion of reactants and products including the chemical nature of the rate-limiting transition state and the role of the enzyme as catalyst. He has been the recipient of a Research Career Development Award from the NIH and presently holds an RO1 grant. In teaching, Dr. Cook teaches both graduate and medical school courses and is presently supervising four Ph.D. candidates.

UPCOMING SEMINAR OF INTEREST TO PHYSICIANS

Unlike a generation ago, today's physician statistically will incur one claim for every six years of practice. The seminar which will be presented is a collaborative effort of leading malpractice attorneys and physicians to assist you in learning how to reduce these risks in your practice.

The first annual Risk Reduction Seminar for Physicians will be held on Saturday, October 22, 1988 at the University of Texas Southwestern Medical Center at Dallas from 8 A.M. to 5 P.M. This one-day seminar reviews the critical legal principles that regulate the practice for medicine for today's practitioner. The high risk and commonly recurring cases will be profiled based upon a data base of over 7,000 reported cases. Leading physicians will provide recommendations to recognize and reduce risks when handling the high risk cases within your specialty. The goal is to reduce the inherent risks in the practice of medicine through legal-medical education in order to protect the rights of both physicians and their patients.

PROFESSIONAL MEETINGS

September 22-24	8th International Symposium on Medical Virology in San Francisco, CA
September 29-30	International Symposium on Alcohol and Seizures in Washington, DC
October 2-5	Annual Meeting of the American Neurological Association in Philadelphia, PA
October 9-14	39th Annual Fall Meeting of the American Physiological Society in Montreal, Canada
October 11-14	41st Annual Symposium on Fundamental Cancer Research in Houston, TX

FOUNDATION RESEARCH SUPPORT

GUSTAVUS AND LOUISE PFEIFFER RESEARCH FOUNDATION current fields of interest are basic bio-medical and pharmaceutical research. Directors are limiting consideration of grant applications to studies in various aspects of medicine and pharmacology. Because of the Foundation's limited resources, pilot projects involving relatively small sums of money are preferred.

The current policy of the Foundation is to request a preliminary inquiry which may be submitted by letter, describing in concise form the project for which support is sought and the approximate funding required. Should a formal application be requested, the needed forms are available in the Research Office.

Annual meetings of the Directors are held in the Spring of each year, usually in April. The Directors also meet in a special Meeting each year, usually in November. In 1986-87 the Foundation funded projects to a total of \$1,300,000. The address of the Foundation is: 2444 Wilshire Blvd., Suite 414, Santa Monica, CA 90403

LUCILLE P. MARKEY CHARITABLE TRUST's present commitment is the support in whole or in part of specific research projects. Emphasis is placed on interdisciplinary efforts by groups of able investigators who are addressing fundamental questions of biomedical science. Most project grants support work in fields such as molecular biology, developmental biology, structural biology, neurobiology, immunology, genetics, virology, and related areas of basic sciences.

Trust funds cannot be provided for clinical studies or for the evaluation of various forms of therapy. But the trustees do encourage basic research studies in which clinical scientists are active participants.

The Trust also supports the Markey Scholar Awards in Biomedical Science to enhance the scientific development and productivity of outstanding young men and women planning research careers in biomedical science. The program provides substantial support in the advanced postdoctoral years and the first five years of faculty service. Additional information may be obtained from the Research Office.

NATIONAL SCIENCE FOUNDATION EQUIPMENT PROGRAMS

The National Science Foundation has numerous research equipment and college instrumentation programs. The following is a list of possibly applicable programs with descriptive brochure and telephone number:

<u>Program</u>	<u>Brochure Number</u>	<u>Phone</u>
Chemical Instrumentation	NSF 86-17	(202)357-7499
Biological Instrumentation	NSF 83-19	(202)357-7652

Equip. Grants for Computer Research	NSF 85-64	(202)357-7349
Instrumentation for Lab Improvement	NSF 87-74	(202)357-7051

THE FEDERAL GOVERNMENT'S TOPICAL INTEREST IN HEALTH RESEARCH AND DEVELOPMENT

Numerous federal agencies invest in health research and development. Agencies may perform the research themselves, or may find outside parties. The following table lists the health research interests of various federal agencies.

Department of Health and Human Services

National Institutes of Health	o	biomedical and clinical aspects of the cause and cure of disease
Centers for Disease Control	o	epidemiology, especially of AIDS
Food and Drug Administration	o	quality and safety of foods, drugs, and medical devices
Health Resources and Services Administration	o	health policy, financing, and administration
Alcohol, Drug Abuse and Mental Health Administration	o	mental health
	o	drug and alcohol abuse
Health Care Financing Administration	o	health policy and financing issues related to the Medicare and Medicaid public insurance programs

Other Agencies

Department of Agriculture	o	nutrition
	o	control of pesticide pollution
	o	animal and plant productivity (nutritional content)
Department of Defense	o	health effects of radiation
	o	defense against chemical and biological weapons
	o	neurobiology and artificial intelligence
	o	use of human senses; sensory aids
Department of Education	o	treatment and rehabilitation of physical and mental handicaps
	o	curriculum development
	o	computer assisted instruction

Department of Energy	o radiation - health hazards and medical uses
Environmental Protection Agency	o harmful effects of biological and chemical agents in the environment
International Development Agency	o tropical disease - Cooperation diagnosis, treatment and prevention o health care delivery in third world countries o fertility control and family planning
NASA	o space medicine: the health effects of a closed biosphere and zero gravity o biomedical and biotechnological applications of space program research
NSF	o basic biochemistry of life processes o biomedical engineering
Veterans Administration	o health policy and administration o rehabilitation o standard biomedicine (note: centralized administration and a stable population of patients facilitates longitudinal studies)

NOTES FROM NIH

The mailing address given for sending applications to the Division of Research Grants or contacting program staff in the Westwood Building is the central mailing address for the National Institutes of Health.

Applicants who use express mail or a courier service are advised to follow the carrier's requirements for showing a street address. The address for the Westwood Building is:

5333 Westbard Avenue
Bethesda, MD 20816

ACADEMIC GROUP FORMED TO COUNTER ANIMAL ACTIVISTS

California, which has been the source of many contemporary trends, may have seen the origin of another. On April 21 (mid-point of activist-sponsored "World Animal Liberation Week") a newly formed group, Association for Animals and Animal Research (AFAAR), held a "Celebration of Life and Health Day" at UC Berkeley. The well-attended event featured exhibits and speeches by faculty, students and others highlighting the benefits gained from animal research. Speakers urged the audience to become active in countering political initiatives of animal rights activists. For more information about the group write to:

AFAAR
Department of Physiology-Anatomy
University of California
Berkeley, CA 94720

HEALTH-RELATED OPERATING FOUNDATIONS CONDUCTING MEDICAL RESEARCH

The following list was compiled from "Health and Medical Organizations", The Encyclopedea of Associations, 21st ed., vol.1 (Detroit:Gale Publishing Company, 1987). The list represents operating foundations whose citations in the encyclopedea indicated some form of involvement in medical research.

<u>Organization</u>	<u>State</u>
Academy of Pharmaceutical Sciences	DC
Acne Research Institute	CA
Adrenal Metabolic Research Society of the Hypoglycemia Fdn.	NY
Alliance for the Prudent Use of Antibiotics	MA
ALSAC St. Jude Children's Research Hospital	TN
Alzheimer's Disease and Related Disorders	IL
American Academy for Cerebral Palsy & Developmental Med.	VA
American Academy of Medical Preventics	CA
American Association for Clinical Chemists	DC
American Association for Dental Research	DC
American Assn. for Pediatric Ophthalmology & Strabismus	CA
American Behcet's Foundation	CA
American Brittle Bone Society	NY
American Burn Association	AZ
American Business Cancer Research Foundation	CT
American Cancer Society	NY
American Dental Association	IL
American Diabetes Association	VA
American Dioptern & Decibel Society	PA
American Federation of Aging Research	NY
American Foundation for Aging Research	MD
American Foundation for AIDS Research	NY
American Foundation for the Blind	NY
American Health Assistance Foundation	MD
American Heart Association	TX
American Institute of Nutrition	MD

American Leprosy Mission	NJ
American Liver Foundation	NJ
American Mental Health Fund	DC
American Narcolepsy Association	CA
American Osteopathic Association	IL
American Paralysis Association	NJ
American Parkinson Disease Association	NY
American Porphyria Foundation	AL
American Public Health Association	DC
American Schizophrenia Association	FL
American Social Health Association	CA
American Society of Cataract & Refractive Surgery	VA
American Tinnitus Association	OR
Amiotrophic Lateral Sclerosis Association	CA
Arms of America (Neurological Diseases)	TX
Arthritis Foundation	GA
Association for Gnotobiotics	NY
Association for Research of Childhood Cancer	MD
Association for the Care of Children's Health	DC
Association for Insulin-Dependent Diabetics	NY
Association of Sleep Disorders Center	NJ
Asthma & Allergy Foundation of America	DC
Benign Essential Blepharospasm Research	TX
Brain Research Foundation	MD
Cancer Federation, Inc.	CA
Center for Sickle Cell Disease	DC
Children's Blood Foundation	NY
Children's Liver Foundation	NJ
City of Hope	CA
Cooley's Anemia Foundation	NY
Cure Foundation (Gastroenterological Diseases)	CA
Cystic Fibrosis Foundation	MD
Cystinosis Foundation	CA
Damon Runyon-Walter Winchell Cancer Fund	NY
Deafness Research Foundation	NY
Dermatology Foundation	IL
Dysautonomia Foundation	NY
Dystonia Medical Research Foundation	CA
Dystrophic Epidermolysis Bullosa Res. Assoc. of America	CA
Epilepsy Foundation of America	MD
Fertility Research Foundation	NY
Fight for Sight	NY
Food and Nutrition Board	DC
Foundation for Cure (Immunological Disease)	CA
Foundation for Depression & Manic Depression	NY
Foundation for Glaucoma Research	CA
Foundation for the Study of Wilson's Disease	NY
Gluten Intolerance Group of North America	WA
Guillain-Barre Syndrome Support Group	PA
Heart Disease Research Foundation	NY
Herpes Resource Center	CA
Homeopathic Council for Research & Evaluation	NY
Human Growth Foundation	MD

Huntington's Disease Foundation of America	NY
Huxley Institute for Biosocial Research	FL
Independent Citizens Research Foundation for the Study Study of Degenerative Diseases	NY
Industrial Health Foundation	PA
International Anesthesia Research Society	OH
International Association for Dental Research	DC
International Council for Infant Survival	IA
International Cystic Fibrosis Mucoviscidosis Assn.	OH
International Joseph Disease Foundation	CA
International Life Sciences Institute	DC
International Society on Thrombosis & Homeostasis	MD
Interstitial Cystitis Association	NY
Joslin Diabetes Center	MA
Juvenile Diabetes Foundation International	NY
Leonard Wood Memorial Foundation	MD
Leukemia Society of America	NY
Lupus Foundation of America	MO
Malignant Hyperthermia Association of the US	CT
March of Dimes Birth Defects Foundation	NY
Michael Fund (Genetics Research)	PA
Muscular Dystrophy Association	NY
Myasthenia Gravis Foundation	NY
Narcolepsy & Catalepsy Foundation of America	NY
National Alopecia Areata Foundation	CA
National Ataxia Foundation	MN
National Council on Drugs	IL
National Dental Association	DC
National Eye & Health Foundation	IL
National Federation of the Blind	MD
National Foundation for Cancer Research	MD
National Foundation for Ileitis & Colitis	NY
National Foundation for Infectious Diseases	MD
National Foundation for Research in Medicine	CA
National Gaucher Foundation	DC
National Hemophilia Foundation	NY
National Hypertension Association	NY
National Institute for Hypertension Studies	MI
National Jewish Center for Immunology & Respiratory Med.	CO
National Kidney Foundation	NY
National Leukemia Association	NY
National Marfan Foundation	NY
National Mental Health Association	VA
National Migraine Foundation	IL
National Multiple Sclerosis Society	NY
National Myoclonus Foundation	NY
National Neurofibromatosis Foundation	NY
National Nutrition Consortium	DC
National Osteopathic Foundation	IL
National Parkinson Foundation	FL
National Reye's Syndrome Foundation	OH
National Society to Prevent Blindness	NY
National Sudden Infant Death Syndrome Foundation	MD

National Tay-Sachs & Allied Diseases Association	NY
Noah Worcester Dermatological Society	KY
North American Society of Pacing & Electrophysiology	MA
Nutrition Institute of America	NY
Optometric Research Institute	MD
Osteogenesis Imperfecta Foundation	NY
Parkinson's Disease Foundation	NY
Parkinson's Education Program-USA	CA
Psoriasis Research Association	CA
Psoriasis Research Institute	CA
Research to Prevent Blindness	NY
Roosevelt Warm Springs Foundation (Neurological Disorders)	GA
RP Foundation Fighting Blindness	MD
Scleroderma Association	MA
Scleroderma International Foundation	PA
Scleroderma Research Foundation	NJ
Scoliosis Research Society	IL
Sickle Cell Disease Foundation of Greater NY	NY
Sjogren's Syndrome Foundation	NY
Skin Cancer Foundation	NY
Spina Bifida Association of America	IL
The American Lupus Society	CA
Tourette Syndrome Association	NY
Tuberous Sclerosis Association of America	MA
United Cancer Council	IN
United Cerebral Palsy Association	NY
United Cerebral Palsy Research & Education Foundation	NY
United Parkinson Foundation	IL
World Federation of Neurology	NC

This reference book will be available in the Research Office shortly. In the next issue we shall publish a list of regional and national private foundations supporting medical research.