

TCOM

research notes

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RESEARCH PROJECTS FUNDED MAY 1 - JUNE 15, 1989

VICTORIA RUDICK, PH.D. (Anatomy)
"Targeted protein secretion in polarized
epithelial cells" NIGMS 05/01/89 - 04/
30/92 \$12,320.

EDWARD E. ELKO, PH.D. and **THOMAS
YORIO, PH.D.** (Pharmacology) "Minority
hypertension research development grant"
05/01/89 - 04/30/90 NHLBI \$35,626.

ROBERT J. WORDINGER, PH.D. (Anat-
omy) "Cell biology of intrusive implanta-
tion" 06/01/89 - 05/31/90 NICHHD
\$45,169.

EDWARD E. ELKO, PH.D. (Pharmacology)
"Minority High School Student Research
Apprentice Program" Kaiser Permanente
Corp. 05/15/89 - 08/31/89 \$1,079.

RAPHAEL ALVAREZ-GONZALEZ, PH.D.
(Microbiology) "Enzymological properties of
mono(ADP-ribosyl)ated poly(ADP-ribose)
polymerase" BRSG 5/23/89 - 03/31/90
\$9,700.

STEPHEN R. GRANT, PH.D. (Biochemis-
try) "Immunological probes for cloning of
the human B cell growth receptors"
BRSG 05/23/89 - 03/31/90 \$15,000.

ROBERT WORDINGER, PH.D. (Anat-
omy) "Polypeptide growth factors in
uterine tissue" BRSG 05/23/89 - 03/
31/90 \$5,000.

OFFICE OF ACADEMIC AFFAIRS "In-
centive Grant Program - Faculty Visit to
University of Missouri - Quarterly Profile
Examination System" National Fund for
Medical Education 05/23/89 - 06/30/
90 \$1,000.

OFFICE OF ACADEMIC AFFAIRS "In-
centive Grant Program - Faculty Visit to
Alverno College - "Curriculum and As-
sessment Process" National Fund for
Medical Education 05/23/89 - 06/30/
90 \$1,000.

OFFICE OF ACADEMIC AFFAIRS "In-
centive Grant Program - Faculty Visit to
the University of New Mexico - "Options

in Medical Education Workshop" National Fund for Medical Education 05/23/89 - 06/30/90 \$1,000.

TOTAL AWARDS **\$126,894**

APPLICATIONS SUBMITTED

05/01/89 - 06/15/89

JAMES DZANDU, PH.D. (Anatomy) "Red cell surface changes in sickle cell division" NIH \$233,970.

STEPHEN R. GRANT, PH.D. (Biochemistry) "Cellular control of human B cell growth factor receptor" NIH \$427,104.

STEPHEN R. GRANT, PH.D. (Biochemistry) "Cellular control of human B cell growth factor receptor" NSF \$168,696.

NORMAN LIESKA, PH.D. (Anatomy) "Lens cytoskeletal function studied by transfection" NEI \$641,789.

ANDRAS G. LACKO, PH.D. (Biochemistry) "Carbohydrate component of LCAT" NIH \$346,047

ANDRAS G. LACKO, PH.D. (Biochemistry) "International symposium on reverse cholesterol transport and coronary heart disease" CDC \$9,750.

ANDRAS G. LACKO, PH.D. (Biochemistry) "Alterations of cholesterol metabolism in aging" The Council for Tobacco Research - USA, Inc. \$66,302.

ELAINE L. JACOBSON, PH.D. (Medicine) "Modification of proteins by ADP-ribose" NSF \$249,691.

THOMAS YORIO, PH.D. (Pharmacology) "Eicosanoid regulation of H⁺ excretion in renal epithelia" NIH \$581,077.

TOTAL REQUESTED **\$2,724,426**

**SCIENTIFIC PUBLICATIONS
AND PRESENTATIONS**

Wilson, J.R. and P.B. Raven "Clinical pulmonary function tests as predictors of work performance during respirator wear" Am. Ind. Hyg. Assoc. J. 50(1):51-71 (1989).

Wilson, J.R., P.B. Raven, W.P. Morgan, S.A. Zinkgraf, R.G. Garmon, and A.W. Jackson "Effects of pressure-demand respirator wear on physiological and perceptual variables during progressive exercise to maximal levels" Am. Ind. Hyg. Assoc. J. 50(2):85-94 (1989).

Wilson, J.R., P.B. Raven, S.A. Zinkgraf, W.P. Morgan and A.W. Jackson "Alterations in physiological and perceptual variables during exhaustive endurance work while wearing a pressure-demand respirator" Am. Ind. Hyg. Assoc. J. 50(3):139-146 (1989).

Smith, M.A., D.L. Hudson, H.M. Graitzer and P.B. Raven "Exercise training bradycardia: the role of autonomic balance"

Medicine and Science in Sports and Exercise 21(1):40-44 (1989).

Wordinger, R.J. and J. Sutton "An ultrastructural examination of oocyte migration through the mouse ovarian surface epithelium during early neonatal development" Anatomical Record 223(4):125 (1989).

Wordinger, R.J., D. Brown, E. Atkins and F.L. Jackson "Superovulation and early embryo development in the adult mouse after prenatal exposure to diethylstilbesterol" J. Reprod. Fert. 85: 383-388 (1989).

Watanabe, N., S. Yonekura, A.G. Williams, and H.F. Downey "Regression and recovery of well-developed coronary collateral function in canine hearts after aorta-coronary bypass" J. Thoracic and Cardio. Surg. 97(2):286-296 (1989).

Murakami, H., S.-J. Kim and H.F. Downey "Persistent right coronary flow reserve at low perfusion pressure" Am. J. Physiol. 256(Heart Circ. Physiol. 25):H1176-H1184 (1989).

Wise, G.E., V.L. Rudick and A.M. Brun-Zinkernagel "Culture and ultrastructure of the rat molar stellate reticulum" J. Dent. Res. 68:899a (1989).

Cahill, D., J. Gorski, S. Marks, and G.E. Wise "Protein biosynthesis by different aged dental follicles in explant culture" J. Dent. Res. 68:927a (1989).

James Dzandu, Ph.D. (Anatomy) spoke on "Sickle Cell Disease" at the Sickle Cell Anemia Association of Texas 11th Annual Meeting and Banquet.

Norman Lieska, Ph.D. (Anatomy) presented a seminar "Regional expression of lens mRNA *in vitro* varies with age" at UT Southwestern Medical Center, Dallas, TX.

Robert J. Wordinger, Ph.D. (Anatomy) presented a paper at the American Association of Anatomists meeting in New Orleans, LA titled "An ultrastructural examination of oocyte migration through the mouse ovarian surface epithelium during early neonatal development."

Robert Bourdage, Ph.D. (Anatomy) presented two papers on computer assisted instruction at the National Symposium on Microcomputers in Medical Education which was held in Omaha, NE. Dr. Bourdage also presented another paper on CAI at the Texas Academic Skills Program in Houston, TX.

Michael W. Emmett-Oglesby (Pharmacology) presented "Tolerance to cocaine" at the Department of Psychiatry, Uniform Services University Health Science in Bethesda, MD.

The following presentations were made by members of Dr. Downey's laboratory (Department of Physiology) at the FASEB meeting in New Orleans:

Murakami, H., S-J. Kim, A.G. Williams and H.F. Downey "Determinants of coronary vasodilatory adjustments to hypoxia."

Lee, S-C., A.G. Williams, S-J. Kim, H. Murakami, and H.F. Downey "Inter-coronary inosine potentiates the vasodilatory response to exogenous adenosine, but not reactive hyperemia."

Kim, S-J., H. Murakami, A.G. Williams and H.F. Downey "Hypoxemia attenuates coronary autoregulation."

Two presentations were made by members of the Anatomy Department at the FASEB

meeting in New Orleans, LA. They were:

Patrick Cammarata, Ph.D. presented a paper "Reversal of galactosemic pathology in cultured lens epithelial cells."

Mia, A.J., Larry Oakford, and Thomas Yorio (Pharmacology) presented a paper "Effects of verapamil on intramembrane fusion in toad urinary bladder."

Brooks, A, and J. Touliatos "Computer Searches: A Guide for Practitioners and Researchers" J. of Home Economics 81(2):23-26 (Summer, 1989).

REORGANIZATION OF NSF DIVISION OF CELLULAR BIOSCIENCES

The Division of Cellular Biosciences (DGB), in the Directorate for Biological, Behavioral, and Social Sciences (BBS), has been reorganized by realigning five former programs (Cell Biology, Cellular Physiology, Developmental Biology, Metabolic Biology, and Regulatory Biology). The Cellular Physiology program has been terminated and its activities assumed by the remaining four. Two programs have been redefined and renamed, i.e., *Metabolic Biology* has become **Cellular Biochemistry**, and *Regulatory Biology* has become **Physiological Processes**. The Division has been reorganized to reflect changes in the boundaries and priorities of the area of science supported by DCB and the program responsibilities have been consolidated and realigned to permit more flexible management in these areas. Dr. Bruce Umminger has been detailed as acting Division Director and Dr. Maryanna Henkart has been designed Special Activities Director.

NSF PAVES WAY FOR SMALL, HIGH-RISK PROJECT GRANTS

The National Science Foundation will launch an initiative this summer that will let program directors approve small, one-time grants for novel or risky research without going through the regular peer review process. The program will provide awards up to \$50,000 for creative, short-term projects.

As currently outlined, NSF would award grants to try out novel ideas, provide for

new expertise and new approaches to old topics, support new work that crosses NSF program boundaries, assist experienced researchers who want to shift or combine fields, enable investigators to venture into emerging research areas, and exploit the one-time availability of facilities or data.

NSF officials say they will provide details in a program announcement they expect to publish in the *Federal Register* by August. The announcement will encourage applicants to call program officers before submitting proposals and will limit proposal narrative to five (5) pages. NSF hopes to cut review time from the usual six months to three weeks.

While grants will be non-renewable, researchers will be able to apply for more than one grant. Investigators with regular research grants will also be able to apply for small grants. And small grant applicants will be able to avail themselves of the standard appeals process if their proposals are turned down.

ARTHRITIS FOUNDATION RESEARCH PROGRAM

The Arthritis Foundation Research Awards offer an excellent opportunity for physicians, scientists, medical students, and non-physician health professionals to conduct research projects and receive research training in arthritis-related fields.

Postdoctoral Fellowships: Two-year award with possible one-year renewal. Stipend is \$18,000-30,000 first year. **Deadline:** September 1, 1989.

Arthritis Investigator Awards: Two-year award with possible one-year renewal. \$45,000 annually for stipend and/or research expenses. **Deadline:** September 1, 1989.

Medical Student Research Awards: One-year award with possible renewal. Stipend is \$11,000 for the first year. It requires a 90% time commitment in research. **Deadlines:** November 1, 1989 and March 1, 1990.

Doctoral Dissertation Awards: For non-physician health professionals, it offers a stipend up to \$10,000/year for one or two years. **Deadlines:** November 1, 1989 and April 1, 1990.

New Investigator Grants: For non-physician health professionals, it offers up to \$15,000/year for one or two years for stipend and/or research expenses. **Deadline:** November 1, 1989.

Arthritis Clinical Project Grants: For physicians and non-physicians, it offers from \$10,000-50,000/year for three years. **Deadline:** August 21, 1989.

Arthritis Biomedical Project Grants: For physicians and non-physicians, it offers \$50,000-75,000/year for three years. **Deadline:** August 21, 1989.

Brochures and applications may be obtained after May 1 from: Arthritis Foundation, Research Department, 1314 Spring Street, N.W., Atlanta, GA 30309 (404) 872-7100.

ADAMHA SMALL GRANTS PROGRAM

Effective June 1, 1989, ADAMHA Small Grant applications will be accepted for up to two years of support, with allowable direct costs of up to \$50,000/year. Applications requesting the current maximum of one year of support at \$25,000 direct costs will continue to be accepted and reviewed. Applications received before June 1 that request more than one year of support, or more than \$25,000 will be held until June 1, 1989. Small grant applications should be submitted six months in advance of the desired start date. Effective June 1, 1989 applications must be submitted for the regular receipt dates for research grant applications.

SMALL GRANTS FOR INNOVATIVE TECHNOLOGY

The *Biomedical Research Technology (BRT) Program*, through grants and contracts, supports an extremely broad and innovative array of technologies. Areas of emphasis in the Program are biomedical computing, biomedical engineering, and sophisticated technologies for the study of biomolecular and cellular structure and function.

This is a one-year, non-renewable award, providing a maximum of \$25,000, for a pilot project in a high technology area in engineering, instrumentation, physics, or computer science related to biomedical research. Project should involve a feasibility study of an innovative, high-risk idea in a high technology. The project should be oriented toward new instrumental or methodological approaches and provide a basis for more extended research in the relevant technology. Supplemental instructions are available in the Research Office. **DEADLINES:** OCTOBER 1 and FEBRUARY 1.

SUPERCOMPUTING RESOURCES AVAILABLE

Grants are available to enable biomedical researchers to use the PSC's Cray Y-MP/832 through a program funded by the Biomedical Research Technology Program, Division

of Research Resources. For application forms and additional information call or write to: Cherolyn A. Brooks, User Services, Pittsburgh Supercomputing Center, 4400 Fifth Avenue, Pittsburgh, PA 15213 (800) 221-1641.

NHLBI BUDGET

The director of the NHLBI has said that the percent of research proposals accepted for funding would fall from 33.9% to 21.0% in FY 1990. He also stated that the institute's budget did not include funding for research facilities. The institute would spend additional funding on research grants, training grants for new researchers, research centers, and last, facilities funding.

NIGMS TERMINATES SHARED INSTRUMENTATION PROGRAM

The National Institute of General Medical Sciences announces the termination of its Shared Instrumentation Program. The final receipt date for applications was February 15, 1989; applications received for that receipt date will be considered for funding from the FY 1990 budget. NIGMS grantees in need of new equipment or desiring to update existing major research instruments are advised to avail themselves of the Shared Instrumentation Program of the Division of Research Resources or to discuss their needs with their NIGMS Program Administrator. Applications for this program will no longer be accepted by NIGMS.

ADDITIONS TO FUNDING RESOURCES LIBRARY

New additions to the Funding Resource Library located in the Research Office are:

Grant\$ for the Aged - covers grants to non-profit organizations in the U.S. and abroad for programs including: advocacy and legal rights, education and community services, employment, health and medical care, recreation, volunteer services and social research.

Handicapped Funding Directory - a guide to sources of funding in the United States for programs and services for the disabled.