TCOM Research Notes

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TCOM Researchers Selected for Review Panels

NIH Names Four TCOM Researchers to National Review Group

The most current published edition, April, 1991, of the *NIH Advisory Committees*, is available in the Research Office and contains detailed information about the NIH peer review system, including biomedical researchers appointed to the study sections. These reviewers are selected based on their outstanding achievements and expertise in specific scientific disciplines or medical specialty areas. The primary function of these reviewers is to determine the scientific merit of research grant applications. Appointments to national review groups represent the outstanding achievements of our faculty and the quality of research activities at TCOM. Congratulations and we salute you!

Paul F. Cook, Ph.D., Professor and Chairman, (Department of Microbiology and Immunology), currently serves as a member of the Biochemistry Study Section at NIH.

Patricia A. Gwirtz, Ph.D., Associate Professor, (Department of Physiology), currently serves as a member or the Respiratory and Applied Physiology Study Section at NIH.

Ben G. Harris, Ph.D., Professor, (Department of Biochemistry and Molecular Biology), currently serves as a member of the Tropical Medicine and Parasitology Study Section at NIH.

Elaine L. Jacobson, Ph.D., Associate Professor, (Department of Medicine), currently serves as a member of the Experimental Therapeutics Study Section at NIH.

TCOM Researcher Serving on NSF Review Panel

Elaine L. Jacobson, Ph.D., Associate Professor, (Department of Medicine), currently serves on the review panel for the Cell and Molecular Biology Program at the National Science Foundation.

Two Named to Heart Association Panel

Thomas Yorio, Ph.D., and Eugene Quist, Ph.D., (Department of Pharmacology), have been selected to serve on the review panel to evaluate grant proposals submitted to the American Heart Association, Texas Affiliate, Inc. Reviewers are selected based on their outstanding research achievements and expertise in specific disciplines.

Department of Education Selects TCOM Reviewer

Harold W. Keller, Ph.D., (Research Office/Department of Microbiology and Immunology) has been selected by the Department of Education as part of a group of educators assembled as a national review panel to evaluate grant proposals submitted to the Minority Participation in Graduate Education Program held in Washington, D.C.

Requirements for Non-Competing Continuation NIH Awards

When submitting applications for non-competing continuation support using the PHS 2590 application kit, the applicant organization is **required** to provide on the face page of the application the most recent date of approval by either the Institutional Review Board (IRB) and/or the Institutional Animal Care and Use Committee (IACUC). This information needs to be provided **at the time** of application submission. The 60-day grace period allowed for competing applications may not be invoked for noncompeting continuation applications. Furthermore, no application for continuation support may be submitted until the necessary IRB certification and/or IACUC verification of review has been obtained (see PHS 2590). Delay in submitting the required certification/verification will result in substantial delays in the award process.

Updated TCOM Institutional Fact Sheet.

This information is provided for use in preparing proposals to external sponsors. The fact sheet (color coded green) has been updated to include the most recent information as of September, 1991. **Copies are available in the Research Office.**

Published by the Research Office, Texas College of Osteopathic Medicine
3500 Camp Bowie Boulevard Fort Worth, Texas 76107-2690 817-735-2561 FAX 817-735-2486

Recent TCOM Awards Received

Congratulations! Research awards of almost $60 million administered through The Texas Higher Education Coordinating Board Advanced Research Program and Advanced Technology Program were recently announced as part of the nation's largest competitive state-supported research grant program. TCOM grantees received four of these awards for a total of $561,097. A total of 3,106 proposals (1,700+ proposal submissions for the $20 million ARP and 1,400+ proposals for the $40 million ATP) were evaluated by 15 scientific and industrial review panels, and of these, 421 proposals were funded for a total of $59,591,807. The top 20-25% of proposal submissions were placed in the Fund-Priority 1 Category. These proposals were deemed the most highly meritorious by reviewers and ranked in priority order within the category. Funds were available to provide grants only for the top 10-15%, so numerous projects in this category could not be funded. A great deal of time and effort was invested by investigators and support staff in preparing the 35 proposals submitted by TCOM to this highly competitive research program. The Research Office staff thanks everyone for their cooperation and effort in making this year's results the best ever for TCOM since the inception of the ARP/ATP program in 1987.

Robert W. Gracy, Ph.D., (Department of Biochemistry and Molecular Biology), "Human Skin and Corneal Equivalents: An Alternative to Animal Testing," The Texas Higher Education Coordinating Board Advanced Technology Program, Biomedicine, $180,000.

Elaine L. Jacobson, Ph.D., (Department of Medicine), "Assessment of Human Niacin Nutriture," The Texas Higher Education Coordinating Board Advanced Research Program, Biological Sciences, $132,596.

John D. Lane, Ph.D., (Department of Pharmacology), "Neurobiology of Tolerance and Reinforcement of Drugs of Abuse - Novel Techniques," The Texas Higher Education Coordinating Board Advanced Technology Program, Biomedicine, $212,000.

Wayne L. Nicholson, Ph.D., (Department of Microbiology and Immunology), "Detection and Quantitation of Unique Ultraviolet Radiation-Induced DNA Damage," The Texas Higher Education Coordinating Board Advanced Research Program, Biological Sciences, $69,650.

Paula Sundstrom, Ph.D., (Department of Microbiology and Immunology), "Proteins of *Candida albicans* an AIDS-related Pathogen," National Institutes of Health - National Institute of Dental Research, 09/30/91 - 09/29/92, $132,268.

Total Funding Awarded: $693,365

Recent TCOM Grant Proposals Submitted

Michael J. Forster, Ph.D., (Department of Pharmacology), "Role of Brain Reactive Antibodies in Cognitive Decline," American Health Assistance Foundation: Alzheimer's Disease Research," $199,680.

John D. Lane, Ph.D., (Department of Pharmacology), "Tolerance to the Reinforcing Effects of Ethanol," Alcohol, Drug Abuse, and Mental Health Administration, $184,534.

Sue G. Lurie, Ph.D., (Department of Medical Humanities), "Ethical Dilemmas, Cultural Values, and Family Decision Processes in Critical Illness," National Endowment for the Humanities, $4,000.

Eugene E. Quist, Ph.D., (Department of Pharmacology), "Regulation of Cardiac Function by Muscarinic Agonists," National Institutes of Health - National Heart, Lung and Blood Institute, $606,684.

Konrad W. Scheel, Ph.D., (Department of Physiology), "The Coronary Venous System," National Institutes of Health - National Heart, Lung and Blood Institute, $629,169.

Richard J. Sinclair, Ph.D., (Department of Physiology), "Health Careers Opportunity Program Project," Department of Health and Human Services - Division of Disadvantaged Assistance, $131,760.

Total Funding Requested: $1,755,827

NSF Supports High-Cost Research Equipment

NSF's Instrumentation and Instrument Development Program awards grants in the range of $35,000 to $500,000 to purchase expensive equipment. NSF requires grantees to cost share from 30 to 50 percent of the purchase price. In fiscal 1991, the program received 159 proposals for new awards and funded 54, for a total of $5.6 million. The program requires that applicants show that many researchers in different areas will use the equipment with a maximum of five suggested. Applicants must also show that the equipment would help promote the education of graduate and undergraduate students and help develop human resources within the institution. Institutional plans for maintenance of the equipment should be provided in some detail. Proposals to establish new laboratories or programs or expand existing programs are given a slight advantage. There are no set firm deadlines but program officers recommend that prospective applicants discuss their proposal with program staff before submitting a proposal.

New Publications Available in the Research Office

Directory of Visiting Fulbright Scholars and Occasional Lecturers lists visiting scholars by academic field and can be used in a number of ways 1) as a means to identify Fulbright visiting scholars working at other institutions whom you can invite to lecture on your campus through the Occasional Lecturer Program; 2) as a reference for faculty members who may wish to identify foreign scholars in fields parallel or complementary to their own; 3) as a resource for identifying foreign scholars in the surrounding region who could serve as guest speakers for campus and community groups; 4) as a mailing list for conference and symposium announcements, and as a locator of foreign guests whom you would like to invite to attend campus social functions.

American Heart Association, Texas Affiliate, Inc. and AHA National Center, Research Projects Listing for 1991-92. This publication gives historical data on heart funding in Texas, the name and address of the research investigator, the project title, and the amount of funding. The reader will find this information helpful in determining the kind of research projects being funding.

• FUNDING OPPORTUNITIES •

FOGARTY INTERNATIONAL RESEARCH COLLABORATION AWARD (FIRCA).

The Fogarty International Center (FIC), under a program of Central and Eastern European and Latin American and Caribbean Initiatives, is providing small grants to U.S. investigators to facilitate cooperation and collaboration between U.S. scientists and scientists in these regions. These small grants will provide funds to the foreign collaborator, through the U.S. grantee institution, for equipment and supplies at his or her home institution, and for travel expenses for both the U.S. principal investigator and the foreign collaborator. Application procedures include the completion of the PHS-398 application kit; special application instructions are necessary and are available from the Research Office. The application consists of a portion to be completed by the U.S. principal investigator, and a separate portion to be completed by the foreign collaborator. Both portions must be submitted as a single package. Receipt dates for completed applications are October 1, February 1, and June 1.

NSF FY 1991 YOUNG INVESTIGATOR AWARDS PROGRAM.

The National Science Foundation announces the inaugural competition for the NSF Young Investigator Awards (NYI). Approximately 150 awards will be made for up to five years at a level of support of up to $100,000 per year. These awards are available only to tenure-track or tenured positions. Application materials are available from the Research Office. **Deadline: January 31, 1992.**

There is also an NSF Presidential Faculty Fellows Program that has a **deadline of December 2, 1991.** Application materials are available from the Research Office.

AMERICAN FEDERATION FOR AGING RESEARCH INC. Biomedical Research in Gerontology and Geriatrics. Funding is provided for one-year grants, up to $25,000 each, in support of clinical and basic research on all biomedical aspects of aging. AFAR is especially interested in research dealing with the basic mechanisms of aging, how age predisposes to disease, and such age-related disorders as sensory failure, memory loss, confusion, and incontinence. Proposals are especially welcome from investigators who are in the early stages of their careers or who are entering the field of aging. **Deadline: January 1, 1991.**

Fellowships are also available for graduate and predoctoral students who are actively involved in a specific biomedical project in the field of aging. Stipends are $500 to $1,000 per semester. Contact: American Foundation for Aging Research, Department of Biochemistry, 128 Polk Hall, North Carolina State University, Raleigh, NC 27595-7622. **No deadline.**

AMERICAN DIABETES ASSOCIATION, INC. - Grants.

Support is provided for the following programs: 1) Career Development Award that provides up to $75,000/year for three years to support new investigators with 2-5 years of postdoctoral research experience; 2) Research Award Program that provides between $20,000 to $40,000/year for two years to assist investigators, new or established. **Deadline: February 3, 1992.**

GUSTAVUS AND LOUISE PFEIFFER RESEARCH FOUNDATION - Grants-in-Aid.

Funds support basic biomedical and pharmaceutical research. Pilot projects involving relatively small amounts of money are preferred, with a maximum of $40,000. The Foundation requests a preliminary inquiry by letter, describing in concise form the research project and the approximate funding required, before submission of a formal application. Contact: George R. Pfeiffer, Secretary-Treasurer, 300 E. State Street, Suite 450, P.O. Box 1153, Redlands, CA 92373. **No deadline.**

ELSA U. PARDEE FOUNDATION - Grants. Research grants ranging from approximately $2,500 to $150,000 are available to support research projects directed toward the cure and control of cancer. The Foundation particularly welcomes innovative, small-scale, short-term projects which may be difficult to fund elsewhere. About one-half of this funding goes to new, innovative projects; about a quarter to established programs, and a quarter for direct treatment of cancer victims. **No Deadline.**

THE PROCTOR & GAMBLE COMPANY - University Exploratory Research Program.

This program provides seed money for radically new concepts with potentially high value to society and of mutual interest to university scientists and the company's research staff. Grants are in amounts up to $50,000 per year for up to three years. Three awards are given each year. **Current application materials are available in the Research Office. Deadline: January 10, 1992.** The Procter & Gamble Company, Miami Valley Laboratories, P.O. Box 398707, Cincinnati, Ohio 45239-8707

AMERICAN CANCER SOCIETY - Research Development Program Grants.

Grants are awarded to provide rapid funding for a variety of critical research needs related to cancer which cannot be supported quickly through the Society's other grant programs. Applications may be either in basic sciences or clinical research. Grants are usually made for a period of up to twelve months and in amounts under $75,000. **No deadline.**

GRANT-IN-AID PROGRAM OF THE AMERICAN HEART ASSOCIATION, TEXAS AFFILIATE.

Annual grant awards are made to support research in cardiovascular function and diseases, including stroke, or to related fundamental problems. This support includes the basic sciences as well as for epidemiological and clinical investigations that bear on cardiovascular problems. Research proposals are encouraged from talented new investigators. Applications will be considered from senior investigators if they are experiencing a funding hiatus or a significant change in direction in their research careers. Budgets include the expenses necessary to conduct the research

FUNDING OPPORTUNITIES continued

up to a maximum of $32,000 per year, plus 10% indirect costs, for one or two-year periods.

Deadline: Received by January 24, 1992. Applications kits are available from the Research Office.

THE SMOKELESS TOBACCO RESEARCH COUNCIL, INC. - Grants-in-Aid.

Funds are available to support research into questions of smokeless tobacco and health. Areas of relevant research include the elucidation of the etiology and pathogenesis of diseases claimed to be associated with smokeless tobacco. More information is available from the Research Office. **Deadline: December 31, 1991.**

THE COUNCIL FOR TOBACCO RESEARCH - Research Grants.

The Council supports basic biomedical and clinical research concerning the etiology or pathogenesis of diseases alleged to be related to tobacco use, notably cancer, heart and circulatory diseases and chronic lung ailments. Applicants should initiate contact by writing to the Council at least six to eight weeks prior to the stated deadlines, stating briefly the problem to be developed, the general plan of investigation, the anticipated duration of the project and a single figure estimate of annual direct costs. Contact: (212) 421-8885.

Deadline: March 15, 1992.

THE TEXAS HIGHER EDUCATION COORDINATING BOARD - New Awards under the Dwight D. Eisenhower Mathematics and Science Higher Education Grants Program.

To provide assistance to public and private universities and colleges collaborating with Texas school districts and schools for significant projects designed to improve the quality of instruction in mathematics and science. Category I, teacher enhancement and teacher preparation projects, K-12 and Category II, Cooperative programs for improving the participation of minority and disadvantaged students in academic level mathematics and science curricula and careers. Also new awards are available for (a) Mathematics or Science Summer Workshops or (b) Retraining for Coordinated Thematic Science Instruction, Grades 7-8.

Deadline for Transmittal of Applications: March 2, 1992.

RECENT PUBLICATIONS

Samuel T. Coleridge, D.O., (Department of General and Family Practice), recently had several book chapters appear in textbooks published in 1991: "Pelvic Pain in Women, in Emergency Medicine: An Approach to Clinical Problem Solving," W. B. Saunders; "Diagnostic Peritoneal Lavage, in Clinical Procedures in Emergency Medicine," coauthored with C. Bell, W. B. Saunders; "IntraUterine Device (IUD) Removal, in Clinical Procedures in Emergency Medicine, W. B. Saunders; "Experts for Emergency Case Reviews and Witness Testimony in Medical Malpractice: Handling Emergency Medicine Cases," coauthored with G. M. Flick, McGraw-Hill.

Coleridge, S.T. 1991. A Proposal to Modify Research and Scholarly Activities During Osteopathic Residency Training. *JAOA* 91: 891-894.

Paul F. Cook, Ph.D., (Department of Microbiology and Immunology), has recently edited a book entitled "Enzyme Mechanism from Isotope Effects" published by CRC Press. This compendium of papers updates our knowledge of the applications of isotopic effects on enzyme reactions. This book not only updates recent advances in the use of isotopes since 1978 but it also represents a complete historical review that incorporates the newest theories in this field of study. Two book chapters were solely authored by Dr. Cook, "Kinetic and Regulatory Mechanisms of Enzymes from Isotope Effects," and "pH Dependence of Isotope Effects in Enzyme-Catalyzed Reactions," and one chapter entitled "Isotope Effects in Enzyme-Catalyzed Group Transfer Reactions" was coauthored with Drs. S. Mallick and Y.-K. Cho.

Harold W. Keller, Ph.D., (Research Office/Department of Microbiology and Immunology), published a paper in a British international journal: Eliasson, U. H., H. W. Keller, and J. D. Schoknecht. 1991. *Kelleromyxa,* a new generic name for *Licea fimicola* (Myxomycetes). *Mycological Research.* 95: 1201-1207.

Harbans Lal, Ph.D., and Michael J. Forster, Ph.D. (Department of Pharmacology), were featured in the September, 1991, Texas Department of Health Alzheimer's Disease (AD) Network Newsletter, Special Issue, Alzheimer's Disease Research in Texas. This research survey highlighted the following research projects: "Biological Markers of Aging and Dementia," Harbans Lal and Michael J. Forster, Principal Investigators, supported by a grant from the National Institute on Aging; "Immunological Correlates of Memory Declines in AD and Aging," Michael J. Forster and Harbans Lal, supported by a grant from the National Institute on Aging; "Reversal of Memory Deficits by New Neurotrophic Chemicals," Michael J. Forster and Harbans Lal; "Benzodiazepine Antagonist Treatment for AD," Harbans Lal and Michael J. Forster.

Frank J. Papa, D.O./Ph.D., (Department of Medical Education), was featured in the American Association of Colleges of Osteopathic Medicine publication entitled FOCUS Digest of 1990 Awards for the project "Transforming Medical Specialists into Medical Educators: The Application of Principles of Instructional Design in the Medical Education Setting," 09/01/91 - 08/31/92, $30,000.

Rao, J. S. G., P. F Cook, and B. G. Harris. 1991. Modification of the ATP Inhibitory Site of the *Ascaris suum* Phosphofructokinase Results in the Stabilization of an Inactive T State. *Biochemistry* 30: 9998-10004.

POSTER AND PAPER PRESENTATIONS

Larry X. Oakford, Ph.D., (Department of Anatomy and Cell Biology), attended the Annual Meeting of the Electron Microscopy Society of America held at San Jose, California, August, 1991 and presented a poster selected for a special platform display entitled "A Transmission Electron Microscopic Study of Methods for Harvesting Epithelial Cells from Human Corneal Tissue," authored by S. D. Dimitrijevich, T. Reese, R. W. Gracy, L. X. Oakford, and W. E Howe; another poster presented was entitled "Role of PKC Isozymes in Water Transport in Toad Urinary Bladder," authored by A. J. Mia, L. X. Oakford and T. Yorio.

Harold W. Keller, Ph.D., (Research Office/Department of Microbiology and Immunology), presented a Myxomycete Workshop at the Annual Meeting of the Mycological Society of America as part of the American Institute of Biological Sciences, August 4, San Antonio, Texas.