



# TCOM research notes

TEXAS COLLEGE OF OSTEOPATHIC MEDICINE  
LIBRARY  
CAMP BOWIE AT MONTGOMERY  
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## RESEARCH IS FEATURED IN SESQUICENTENIAL OBSERVANCE

As a part of the sesquicentennial celebration the Austin Commission is sponsoring Texas Women Scholars: Contemporary Perspectives, a symposium which will be held at the University of Texas at Austin, April 3 - 4, 1986. Five TCOM faculty have submitted abstracts for possible inclusion in the program. They are:

"Dysfunctional Uterine Bleeding - A Review" - Dr. Carla Devenport, General and Family Practice.

"Limitation of Myocardial Contractile Function During Exercise by a Coronary Alpha-Adrenergic Vasoconstrictor Tone" - Dr. Patricia Gwartz, Physiology.

"Insulin Binds to the Cell and Then Something Happens!" - Dr. Ruthann A. Masaracchia, Biochemistry.

"The Role of the B-Vitamin, Niacin, in the Prevention of Cancer" - Dr. Elaine L. Jacobson, Medicine/Biochemistry.

"Use of an Animal Model for Anxiety: Pentylenetetrazol Discrimination" - Dr. Cynthia May Harris, Pharmacology.

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## JANUARY PROPOSALS SUBMITTED:

NIH (transfer) "Regulation of Metabolism in Parasitic Helminths" BEN HARRIS, Biochemistry.

NIH (transfer) "Alteration of NAD Metabolism by Chemical Carcinogens" MYRON K. JACOBSON, Biochemistry.

Smokeless Tobacco Council "Differential Cardiac Effects of Nicotine and Cigarette Smoke" FRED DOWNEY, Physiology.

Burroughs Wellcome Fellowship - "Effects of Chronic Administration of Cocaine on Specific Brain Sites: Behavioral Analysis" DOUGLAS WOOD, Pharmacology.

Meadows Foundation - "Cardiovascular Responses to Physiological Stresses in the Aged: Physical and Biochemical Mechanisms" BOB GRACY and CARL JONES, Biochemistry/Physiology.

AHA - "ADH, Phospholipids and Epithelial Transport" TOM YORIO, Pharmacology.

WHO - "Control Mechanism in Filarial Energy Metabolism" BEN HARRIS, Biochemistry.

AHA - "Models for Endothelium-Smooth Muscle Cell Interaction" NORMAN LIESKA, Anatomy.

NIH - "Regional, Non-Ischemic Myocardial Hypoxia" FRED DOWNEY, Physiology.

AHA - "Carotid Baroflex in Sedentary and Endurance Trained Men" PETER RAVEN, Physiology.

American Diabetes Association - "Synthesis of Basement Membrane Components and Their Relationship to Aldose Reductase Activity in the Bovine Lens Epithelial Cell" PAT CAMMARATA, Anatomy.

AHA - "Conditioned Elevation of Blood Pressure in Normotensive Rats" SMART IDEMUDIA, Pharmacology.

AHA - "The Regulation of Hepatic LDL Receptors" B.J. KUDCHODKAR, Biochemistry.

AHA - "Calcium Handling in Cardiac Subcellular Fraction in Shock" PHYLLIS KUTSKY, Physiology.

AHA - "Regulation of Cardiac Functions by Muscarinic Receptors" EUGENE QUIST, Pharmacology.

AHA - "Interactions of Adenosine and Angiotensin II on Renal Arteries" RICHARD SINCLAIR, Physiology.

NIH - "Mechanism of Action of LCAT" ANDRAS LACKO, Biochemistry.

AHA - "Effect of Surface Charge on Sodium Channel Gating Kinetics" RAYMOND B. MOSS, Rehab/Sports Medicine.

AHA - "RBC Adherence and Vaso-Occlusion in Sickle Cell Anemia" GARY WISE, Anatomy.

AHA - "Beta-Adrenergic Receptors and Myocardial Response to Exercise" HOWARD MASS, Physiology.

AHA - "Determinants of Right Coronary Blood Flow" JOHN GAUGL, Physiology.

AHA - "Altered Mechanism of Blood Pressure Control with Age" JUDY WILSON, Physiology.

NIH - "Regulation of Cardiac Function by Muscarinic Agonists" EUGENE QUIST, Pharmacology.

NIH - "Exercise Training and Baroreceptor Function" PETER RAVEN, Physiology.

National MS Society - "Central Nervous System Associated Mast Cells and Experimental Autoimmune Encepholymelitis" ED ORR, Anatomy.

Juvenile Diabetes - "Synthesis of Basement Membrane Components and Their Relationship to Aldose Reductase Activity/Bovine" PAT CAMMARATA, Anatomy.

NIH - "Cytoskeletal Interactions in the Crystalline Lens" NORMAN LIESKA, Pharmacology.

TOTAL GRANT FUNDING APPLIED FOR IN JANUARY, 1986      \$3,352,474

#### DEADLINES AND MEETING DATES

NIH: Although the Research Office sent out a schedule of the new grant deadlines, it will not be amiss to state it again:

NEW APPLICATIONS, CAREER DEVELOPMENT AWARDS, CONFERENCE APPLICATIONS, PROGRAM PROJECT AND CENTER APPLICATIONS - February 1, June 1 and October 1

COMPETING RENEWALS AND SUPPLEMENTAL REQUESTS - March 1, July 1, and November 1.

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Burroughs Wellcome Osteopathic Research Fellowships - deadline is extended to February 28, 1986 (must not be postmarked later than that date). The fellowship is intended to be "seed money" to encourage an osteopathic physician to contribute to research throughout his/her career in osteopathic medicine. The instructions and application are part of the Osteopathic Research Handbook and are available in the Research Office.

#### MEETINGS:

February 5-8	14th Annual Meeting of the International Neuropsychology Society in Denver, CO.
February 6-8	11th International Joint Conference on Stroke and Cerebral Circulation in San Francisco, CA.
March 4-7	Seventh International Conference on Myasthenia Gravis in New York City.
March 12-15	AOA Research Conference, Chicago, IL.
March 22-26	Annual Meeting of the American Society for Neurochemistry in Montreal, Canada.
March 23-28	Annual Meeting of the American Society for Microbiology, Washington, D.C.
April 30-May 2	Alcohol and the Cell in Philadelphia, PA
May 8-10	Computer Applications in Medicine and Health Care in Anaheim, CA.
June 8-12	American Society of Biological Chemists in Washington, D.C.

#### NEWS AND NOTES

The Biochemistry Department has submitted 22 abstracts of posters to be presented at the annual ASBC meeting in Washington, D.C. in June. This is the combined effort of faculty, post-docs and graduate students. The

Anatomy faculty attended the annual meeting of the American Society for Cell Biology where they presented seven posters.

TCOM has been cited as one of the academic institutions involved in NASA life science research.

The TCOM library has just added an excellent volume to the collection. It is Fundamentals of Clinical Trials by L. Friedman, C.D. Furberg and D.L. DeMets. It addresses design and development phases of a trial, recruitment techniques, methodology of data collection, techniques of survival analysis, data monitoring, reporting and interpreting of results and information about multicenter studies. It is an excellent reference source as well as a text for the teaching of clinical trial methodology.

The Research Office has received the new issue of the NIH Public Advisory Group Manual, October, 1985. In it are listed the members of the review panels. Also available are the guidelines which are given to reviewers of NIH, NSF, and EPA proposals. They are available for the asking.

We had the opportunity to meet with and learn from Noriyasu Watanabe, M.D., Ph.D. at the FACULTY FORUM which was held on January 28, 1986. Dr. Watanabe is Chief surgeon at Hokkaido Prefectural Kushiro Hospital in Hokkaido, Japan. He is taking an extended sabbatical from his duties in Japan to do collaborative research with Dr. Fred Downey in the area of cardiovascular physiology.

Some of the future speakers at the FACULTY FORUM include Drs. Peter Raven, Kim Korr, Robert Irvin, Stan Weiss, Bob Gracy, Carl Jones, Bernard Rubin, Andy Lacko, Fred Downey, Don Hagan, Jeff Bleicher and Monte Troutman. There are still five open dates, and the Research Office will be happy to accept all volunteers.

"GRANT MANAGER" - The Research Office has a manual and demonstration diskette of a new IBM PC program to help investigators more effectively manage grant and contract funds. With this program it is possible to record, print and track orders as well as maintain current grant balances. The hardware required is an IBM XT or IBM PC compatible equipped with a hard disc. It requires at least 384K memory. Anyone interested is welcome to check it out of the research library in our office.

"FORM 4 - USE OF HUMAN SUBJECTS PERIODIC REVIEW" - The periodic review forms were sent to all active investigators in September. As of this date not all of them have been completed and returned. The Institutional Review Board must know which projects are still active so that the board approval can be updated as per NIH regulations. Please submit these ASAP if you have not yet done so.

#### GRANT WRITING SEMINAR OFFERED AT NTSU

Dr. Lillian Linebarger, faculty member in the College of Education at NTSU, will offer a grant writing seminar on February 22 and March 29. Both sessions will be on Saturdays from 9 A.M. to 3 P.M. in Highland Hall 214. Contact Dr. Linebarger at 565-2715 for further information.

## FACULTY PROFILE

### BERNARD R. RUBIN, D.O.

Dr. Bernard R. Rubin, D.O. is an Assistant Professor in the Department of Internal Medicine. Dr. Rubin received his D.O. degree in 1976 from the Chicago College of Osteopathic Medicine. He did his internship at the Chicago Osteopathic Hospital and his residency in internal medicine at the Albert Einstein Medical Center in Philadelphia, PA. In 1980 he began his specialization in rheumatology first at Albert Einstein and then as a Fellow at Thomas Jefferson University School of Medicine also in Philadelphia. In 1982 he was a Fellow in Clinical Immunology at Hahnemann University as well as an Instructor in Medicine. In 1983 Dr. Rubin joined the faculty of the Texas College of Osteopathic Medicine. He has published numerous journal articles and is active in professional societies related to his field.

One of the definitive reasons that Dr. Rubin chose to come to TCOM was the desire to be part of an academic environment where he could have patient contact, teach and do research. In his view, the purpose of a medical school is to prepare a physician to think critically and systematically. Both the basic science and clinical science teaching should contribute to this final goal. Dr. Rubin is committed to the development of the osteopathic physician as the physician prepared to meet the needs of the practice of medicine in the 21st century. He believes that osteopathy has always been on the mark due to its orientation and commitment to prevention and wellness.

Dr. Rubin has actively engaged in research during his three years at TCOM. He has completed a project with Dr. Bob Gracy on peripheral blood lymphocytes from young rheumatoid arthritis patients and is currently collaborating on a project with Dr. Ming-Chi Wu, also of Biochemistry. We are proud to have Dr. Rubin as a member of our faculty and the TCOM family.

### FUTURE FUNDING AREAS:

June 1 - (NIH -NIADDK) "Biological Mechanisms of Omega-3 Fatty Acids in Health and Disease States". The National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration invite grant applications for the support of research to elucidate the biological mechanism by which a seafood diet or the ingestion of fish oils influence health and modulate a number of disease processes. A number of studies have indicated a role for fish oils in prostaglandin metabolism, autoimmune disease, thrombosis and deaths from cardiovascular disease. Grant applications are solicited in the following areas, but these should not be viewed as constraints: Eicosanoid Formation and Metabolism; Thrombosis and Atherosclerosis; Plasma Lipids and Lipoproteins; Immunology and Inflammation; Cell Membrane Function and Metabolism Throughout the Life Cycle. Multidisciplinary collaborations are encouraged. Additional information is available through the Research Office.



September 15 - Alcoholic Beverage Medical Research Foundation - Research priorities are in four areas: 1) effects of moderate use of alcohol , and factors influencing the transition from moderate to excessive drinking; genetic, clinical, epidemiological, pharmacological, behavioral and social studies are considered. 2) beverage differences in relation to the spectrum of biomedical, behavioral, and social effects of alcohol in man; 3) inter-relationships of alcoholic beverages and nutrition; and 4) traffic accidents, with special reference to the role of alcohol. Studies specifically directed toward the so-called fetal alcohol syndrome and treatment and counseling of alcoholics will have low priority. Grants are typically awarded in the range of \$5,000 - \$30,000 for a one year period.

#### FELLOWSHIP OPPORTUNITIES:

##### GERONTOLOGY:

Didi Hirsch Community Mental Health Center announces the availability of APA-approved, funded internships in clinical psychology, with an emphasis on gerontology. Internships begin June, 1986. To apply, for more information, contact: Scott Sherman, Ph.D., Acting Director of Training, Didi Hirsch Community Mental Health Center, 4760 South Sepulveda Blvd., Culver City, CA 90230. (213) 390-6612.

A two-year fellowship in Geriatric Medicine is offered at the Veterans Administration Medical Center in Denver, CO beginning July, 1986. Participants will have exposure to a wide array of geriatric care settings both institutional and non-institutional. The program is intended for those with an interest in academic geriatric medicine with an emphasis on development of expertise in clinical research in health care delivery. Applicants must be board eligible in internal medicine. Direct inquiries to: Dennis Jahnigan, MD Chief, Geriatric Section (111D), VAMC, 1055 Clermont Street, Denver, CO 80220.

HEALTH TECHNOLOGY ASSESSMENT REPORTS: available through the National Center for Health Services Research and Health Care Technology Assessment. These publications are sent to the Research Office on a regular basis and relate to topics of current research interest. Two recent reports are "Apheresis in the Treatment of Guillain-Barre Syndrome" by Harry Handelsman, D.O. and "Patient Selection Criteria for Percutaneous Transluminal Coronary Angioplasty" by Martin Erlichman, M.S. Additional copies may be obtained at no cost.

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Don't be left out of the "in" group

attend

FACULTY FORUM

HELD EVERY TUESDAY, 12:03 P.M. in Room 1-444

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