JEFFRESS RESEARCH GRANT AWARDS

The Allocations Committee of the Thomas F. and Kate Miller Jeffress Memorial Trust has announced the award of Jeffress Research Grants to the institutions listed below to support the research of the investigator whose name is given. The Jeffress Trust, established in 1981 under the will of Robert M. Jeffress, a business executive and philanthropist of Richmond, supports research in chemical, medical and other natural sciences through grants to non-profit research and educational institutions in the Commonwealth of Virginia. The Jeffress Research Grants being announced here have been awarded in 1994.

The Jeffress Memorial Trust is administered by NationsBank of Virginia, N. A. Additional information about the program of the Trust may be obtained by writing to: Advisor, Thomas F. and Kate Miller Jeffress Memorial Trust, NationsBank, Trust Division, P. O. Box 26903, Richmond, VA 23261.

- Deborah C. Bebout, College of William and Mary. Mechanistic Comparison of Evolutionarily Divergent Peptidyl a-hydroxylating Monooxygenases. \$16,000 (one year).
- Stephen J. Beebe, Eastern Virginia Medical School. Molecular Genetic Characterization of cAMP Signal Transduction. \$10,000 (one year renewal).
- Amy H. Bouton, University of Virginia. Molecular Cloning and Characterization of the PP6^{src} -associated Protein p130. \$20,488 (one year renewal).
- Karen J. Brewer, Virginia Polytechnic Institute and State University. The Reductive Coupling of Carbon Dioxide Using Novel Bimetallic Catalysts. \$20,189 (one year renewal).
- William G. Broaddus, George T. Gillies, John T. Stewart, Virginia Commonwealth University. Improved Medical Imaging for Neurological Procedures. \$28,950 (one year).
- Daniel J. Burke, University of Virginia. Identifying Novel Factors that Regulate Spindle Function. \$10,000 (one year renewal)
- Jiande Chen, University of Virginia. Noninvasive Measurement of Migrating Motility Complex of the Human Small Intestine Using Surface Electrodes. \$20,000 (one year renewal).
- Claire Cronmiller, University of Virginia. Molecular and Genetic Characterization of 1(3)1344, a Gene Required for Ovarian Follicle Formation in Drosophila. \$18,550 (one year).
- Alan C. Dalkin, University of Virginia. Regulation of Gonadal Activin Receptor Gene Expression. \$25,685. (one year).

- Martin J. Dudziak, Virginia Commonwealth University. A Study of Cytoskeletal Structural Variations and Classifications Using Scanning Probe Microscopy and Neural Networks. \$19,800 (one year).
- M. Samy El-Shall, Virginia Commonwealth University. Gas Phase Polymerization Catalyzed by Metal Cations. \$ 10,000 (one year renewal).
- M. G. Finn, University of Virginia. Asymmetric Synthesis of Allenes with Titanium-Substituted Ylides. \$21,900 (one year).
- Anthony Frankfurter, University of Virginia. Antisense Peptides as Probes for Characterizing Microtubule Protein. \$10,000 (one year renewal).
- Troy M. Glembot, Eastern Virginia Medical School. Effects of Endotoxemia on Skeletal Muscle Microcirculation. \$22,589 (one year).
- Frederico Gonzalez-Fernandez, University of Virginia. Molecular Analysis of Interphotoreceptor Retinoid-Binding Protein. \$10,000 (one year renewal)
- Samuel A. Green, University of Virginia. Rapid Lysosomal Targeting of Amyloid Precursor Protein. \$20,800 (one year).
- Keith Griffioen, College of William and Mary. Spin Structure of the Proton and Neutron. \$14,194 (one year).
- Shelley Halpain, University of Virginia. Regulation of Dendritic Microtubules in Neurons. \$10,000 (one year renewal)
- Daniel J. Haisenleder, University of Virginia. Intracellular Regulation of Prolactin Gene Expression. \$22,000 (one year).
- Colleen Jackson-Cook, Virginia Commonwealth University. Genetic Factors in Human Sperm Aneuploidy. \$10,000 (one year renewal).
- Robert H. Kretsinger, University of Virginia. Determination of the Crystal Structure of 3-Deoxy-D-manno-2-octulosonate-8-phosphate Synthase (KDOPsyn). \$ 10,000 (one year renewal).
- Thomas J. Lauterio, Eastern Virginia Medical School. Role of Growth Factors and Thyroid Hormones in Nerve Regeneration. \$21,270 (one year).
- Susan E. Lazendorf, Eastern Virginia Medical School. In Vitro Maturation of Cynomolgus Monkey Oocytes. \$12,800 (one year).
- Mark Lee, University of Virginia. Exploration of Microwave and Millimeter-Wave Antennas Using High-Temperature Superconductor Thin Films. \$27,300 (one year).

- Joyce A. Lloyd, Virginia Commonwealth University. Developmental Regulation of the Human Fetal and Adult *B*-like Globin Genes. \$8,700 (one year renewal).
- Francine Marciano-Cabral, Virginia Commonwealth University. The Chemotactic Response of *Naegleria fowleri* Amoeba. \$10,000 (one year renewal).
- Laura K. Moen, Old Dominion University. Cloning and Expression of HTLV-1 Reverse Transcriptase. \$10,000 (one year renewal).
- Mary C. Mahony, Eastern Virginia Medical School. Regulation of the 5a-reductase Enzyme within the (non-human primate) Epididymis. \$20,758 (one year).
- Mitzi Nagarkatti, Virginia Polytechnic Institute and State University. Role of Adhesion Molecules in Experimental Immunology. \$10,000 (one year renewal).
- Sergio Oehninger and Ke-Wen Dong, Eastern Virginia Medical School. Expression and Characterization of Human Zona Pellucida Protein 3. \$2 1,090 (one year).
- William A. Petri, Jr., University of Virginia. Characterization of the Immune Response to *Leishmania chagasi* heat shock protein 7O(hsp7O) in patients with Leishmaniasis. \$23,144 (one year).
- Robert D. Pike, College of William and Mary. Preparation and Elaboration of Novel (Cyclohexadienyl) Manganese Complexes- \$10,000 (one year renewal).
- Ary S. Ramoa, Virginia Commonwealth University. Activity-Dependent Mechanisms in the Lateral Geniculate Nucleus During Development. \$13,834 (one year).
- James L. Riopel, University of Virginia. Cellular and Biochemical Basis of Host Resistance During the Penetration Phase of *Striga asiatica*. \$16,250 (one year).
- Emilie F. Rissman, University of Virginia. Multiple Forms and Functions of Gonadotropin-Releasing Hormone(GnRH), \$10,000 (one year renewal).
- Joseph K. Ritter, Virginia Commonwealth University. Cellular Models to Study Roles of UDP-glucuronosyl Transferases in Cancer Protection. \$23,152 (one year).
- James R. Roesser, Virginia Commonwealth University. Tissue-Specific Regulation of Alternative RNA Splicing. \$14,194 (one year).
- Paul K. Ross, Virginia Commonwealth University. Synthesis and Spectroscopic Characterization of Models for Nickel-Containing Metalloenzymes. \$ 10,000 (one year renewal).

- Steven M. Roth and Jock Wheeler, Eastern Virginia Medical School. Evaluation of the Role of Monocytes in Pretreatment of Expanded Polytetrafloroethylene Grafts Prior to Endothelial Cell Seeding. \$14,401 (one year).
- Sarah E. Swank, Bridgewater College. Forest Regeneration: Interactions among Tree Seedlings, Ferns and Mammalian Browsers. \$8,312 (one year).
- Richard A. Walker, Virginia Polytechnic Institute and State University. Characterization of Motor-Microtubule Interaction Sites. \$24,956 (one year).
- Fang-Shen Wu, Virginia Commonwealth University. Induction of Gene Expression for Binding Proteins by Calcium Perturbation in Germinating Pollen Cells. \$10,000 (one year renewal).