

ALTERNATIVES RESEARCH GRANT PROGRAM

Alternatives Research & Development

F O U N D A T I O N

Funded Research Projects

Since the inception of the Alternatives Research Grant Program, the ARDF has provided more than \$1.5 million in direct grant support of projects such as those sampled below.

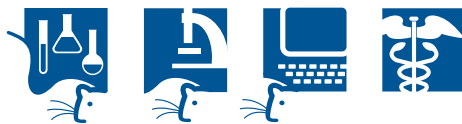
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- ▶ **Discrete Event Computer Simulation of B cell Mediated Kidney Transplant Rejection**
Martin S. Zand, University of Rochester Medical Center
- ▶ **Development of a Simple, Inexpensive Alternative to Animal Models for Testing New Photosensitizers for Cancer Photodynamic Therapy**
Jin Z. Zhang, University of California- Santa Cruz
- ▶ **Using Aggregates of Cancer Cell Lines Grown in a Perfused Bioreactor as an Alternative to Animal Models for Evaluating the Efficacy of Radiotherapy and Chemotherapy Treatment Protocols**
Joseph L. Roti Roti, Washington University
- ▶ **Inhibition of HIV Infection and Dissemination in a Human Tissue Culture Model of Cervico-vaginal Transmission**
David H. Schwartz, Johns Hopkins University
- ▶ **Efficient Construction of Human Antibody Phage-display Libraries: Toward Animal-free Production**
Michael D. Sheets, University of Wisconsin
- ▶ **Ex Vivo Mammary Epithelial Cell Cultures as Model to Replace In Vivo Mouse Models of Breast Cancer**
Gerburg M. Wulf, Beth Israel Deaconess Medical Center
- ▶ **A Dynamic In Vitro device for Extensive Pharmacological Study at the Blood Brain Barrier**
Luca Cucullo, The Cleveland Clinic Foundation
- ▶ **Human Tissue Slices as an Alternative for Mouse Models in the Evaluation of Gene Therapy Vectors**
David T. Curiel, University of Alabama Birmingham
- ▶ **An Alternative In Vitro Biofilm Model for Antibiotic Assessment: A comparison and potential replacement of a murine model of infection**
Michael J. Rybak, Wayne State University
- ▶ **Recombinant Fetuin as Replacement for Fetal Bovine Serum**
Philippe Arnaud, Medical University of South Carolina
- ▶ **Regulation of p53 Gene Family Expression in Clam Leukemia Cells**
Carol Reinisch, Woods Hole Marine Biological Laboratory
- ▶ **Dogs, Scats and DNA: A Non-Invasive Approach for Carnivore Field Studies**
Katherine Ralls, Smithsonian Institution
- ▶ **Novel Alternative Approach to Study Biologic Mechanisms for Tendinitis**
James Wang, University of Pittsburgh
- ▶ **Use of Human Embryonic Palated Mesenchymal Cell Line in Cleft Palate Research**
Chada Reddy, University of Missouri - Columbia
- ▶ **In Vitro Burn Injury Model Using Bioengineered Human Living Skin Equivalents**
Charles Hewitt, University of Medicine and Dentistry of New Jersey
- ▶ **Effects of Organophosphates on Neuronal Molecular Differentiation**
Evelyn Tiffany-Castiglioni, Texas A& M University

- ▶ **Validation of an In Vitro Model of the Blood-Brain Barrier**
Damir Janigro, Cleveland Clinic
- ▶ **In Vitro Assessment of Immunity to HIV**
David Schwartz, Johns Hopkins University
- ▶ **Generation of Human Monoclonal Antibodies by In Vitro B Cell Activation & Expansion**
Lisa Cavacini, New England Deaconess Hospital
- ▶ **Development of a Simple, Inexpensive Alternative to Using Mice for Small, Medium and Large Scale Monoclonal Antibody Production**
John & Ginger Reddington, DiagXotics and Jerry Heidel, Oregon State University
- ▶ **Development of a Ligation-Independent Cloning Vector for In Vitro Production of Human Monoclonal Antibodies**
Loren Peterson, Baylor College of Medicine
- ▶ **Evaluation of Hollow Fiber Bioreactor Systems as an Alternative to Murine Ascites for Small Scale Monoclonal Antibody Production**
Neil Lipman, Memorial Sloan-Kettering Cancer Center
- ▶ **Co-Culture of Human Smooth Muscle and Endothelial Cells as a Model for Atherosclerosis**
Katherine Cole, University of Maryland Medical School

- ▶ **Assessment of Infectivity of Cryptosporidium Oocysts by Fluorescent In Situ Hybridization (FISH) as an Alternative Method to Mouse Bioassay**
Thaddeus Graczyk, Johns Hopkins University
- ▶ **Prediction of Human CYP3A Induction by a Receptor-Activator Based Method**
Binfang Yan, University of Rhode Island
- ▶ **In Vitro Methods for Diagnosis of Clostridium Perfringens Enteric Infections**
Glen Songer, University of Arizona
- ▶ **Regulation of Tight Junctions in a Cultured Human Corneal Epithelial Cell Line**
Ruy Tchao, University of the Sciences in Philadelphia
- ▶ **PAI-2 and Keratinocyte Homeostasis**
Pamela Jensen, University of Pennsylvania
- ▶ **Detection of Teratogens by Utilization of B-galactosidase Reporter Gene Activity**
Nicole Bournias-Vardiabasis, California State University
- ▶ **Immune Function in Fish: A Method for Assessing the Impact of Environmental Contamination**
Renate Reimschuessel, University of Maryland
- ▶ **Lung Macrophage Based In Vitro Assays of Toxicity in Respirable Particles**
Lester Kobzik, Harvard University School of Public Health
- ▶ **An Alternative In Vitro Assay for Contaminant Pyrogens**
John Reddington, DiagXotics
- ▶ **A New Human Cell Culture Assay for the Identification of Anti-Cancer Drugs**
John Sedivy, Yale University School of Medicine
- ▶ **Pharmaceutical Aerosol Disposition in a Simulated Lung Utilizing Bronchiolar Epithelial Cells**
Anthony Hickey, University of North Carolina
- ▶ **Development of a New In Vitro Assay for Chemotaxis as a Component of In Vitro Alternatives to Replace the Draize Eye Test**
Ruy Tchao, University of the Sciences in Philadelphia
- ▶ **Development of an In Vitro Alternative to Replace the Isolated Tissue Bath Assay**
Ruy Tchao, University of the Sciences in Philadelphia
- ▶ **Organotypic (Raft) Culture System Keratinocyte-Dependent Chemokine Production as a Predictor of Dermatitis**
Craig Meyers, Penn State University

- ▶ **An Alternative to Animal Models for Surgical Training: A Cadaveric-Based Lifelike Training Model**
Emad Aboud, University of Arkansas Medical School
- ▶ **The Use of Three-Dimensional Imaging and Interactive Videodisc as an Alternative Method of Teaching Surgery**
Karl Kraus, Tufts University Veterinary School
- ▶ **Computer Graphic Animations for Interactive Videodisc Alternatives to Live Animal Teaching Laboratories**
Charles Branch, Auburn University
- ▶ **Employing Simulation Technologies for Veterinary Surgical Training to Reduce Animal Use: Accelerating Adoption**
Mary A. McLoughlin, The Ohio State University
- ▶ **Artificial Nerve from Human Cortical Cells: An Alternative to Animal Sciatic Nerves**
Catherine M. Klapperich, Boston University



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F O U N D A T I O N

ALTERNATIVES RESEARCH & DEVELOPMENT FOUNDATION
801 Old York Road, Suite 316
Jenkintown, PA 19046 USA

Phone: (215)887-8076 ~ Fax: (215)887-0771
www.ardf-online.org • info@ardf-online.org

Supporting Non-Animal Methods in Research, Testing and Education