

UNIVERSITY RESEARCH COMMITTEE

ANNUAL REPORT

FISCAL YEAR 1992



**UNIVERSITY RESEARCH COMMITTEE
FISCAL YEAR 1992 AWARD SUMMARY
5/1/91 - 4/30/92**

Total Allocation	\$115,000.00
Balance Carried Forward from FY '91	<u>24,788.00</u>
Total URC Budget	\$139,788.00

Fellowships	\$114,519.00
Small Grants/Special Projects	7,500.00
Meadow Brook Conference Grant*	3,000.00
Research Seminars	7,930.00
Books, Reprints, & Page Charges	<u>6,839.00</u>
Total Expenditures	\$139,788.00

*The award recipient in this category also receives in-kind support from Meadow Brook Hall.

SUPPLEMENTAL EXPENDITURES

Alumni Association Support:

Undergraduate Research Grants	\$2,345.45
Graduate Research Grants	\$4,155.00
Alumni Conference Grants	\$3,000.00

Office of the President/Special Support:

Interdisciplinary Project Grants	\$21,000.00
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O.U. Foundation Support:

Research Excellence Award	<u>\$ 2,500.00</u>
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Total Supplemental Expenditures	\$33,000.45
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FELLOWSHIP AWARDS

Name	Title	Amount
Baruch Cahlon Mathematical Sciences	"Numerical Stability for Differential and Integral Equations With a Delay"	\$6,000
David Garfinkle Physics	"Projects in Classical General Relativity"	\$6,000
Stanley Hollingsworth Music, Theatre & Dance	"A Concerto for Clarinet and Orchestra"	\$5,700
Ravindra Khattree Mathematical Sciences	"Testing and Estimation of Variance Components in Non Ideal Situations"	\$6,500
Seyoung Kim Engineering & Computer Science Electrical & Systems	"An Efficient Retransmission Algorithm in Spread Spectrum Multiple Access"	\$6,000
Ching Ko Engineering & Computer Science Mechanical	"Stress and Vibration Analyses of Rotating Sandwich Tapered Beams"	\$5,700
Lee Rivers Mobley Business Administration Economics	"A Structural Model of Firm Behavior Over Time in Increasingly Competitive Hospital Markets: Can Competitive Reforms Instead Increase Profits?"	\$6,990
Rammohan Pisharodi Business Administration Management/Marketing	"An Empirical Study of Reverse Channels of Distribution"	\$6,700
Michelle Piskulich Political Science	"Toward a Comprehensive Model of Welfare Exits"	\$7,000
Phyllis Rooney Philosophy	"Rationality: A Feminist Analysis"	\$6,250
Takis Sakkalis Mathematical Sciences	"Algebraic Numbers & Rational Curves"	\$6,180

FELLOWSHIPS (continued)

Sally Silk Modern Languages & Literatures	"History and the Narrator in Three Modern French Travel Novels"	\$6,099
Andrei Slavin Physics	"Spin Waves in Ferromagnetic Films; Angular Dependences of Nonlinear and Thermal Properties"	\$6,500
Michael Smith Linguistics	"Non-Canonical Grammatical Structures in Cognitive Grammar"	\$6,600
Susan Thomas Political Science	"State Marriage Incentive Programs and Teenage Single Mothers: Political and Policy Implications of Recent State Welfare Reform"	\$7,000
Yuan Ting Political Science	"An Analysis of the Impact of AFDC Benefit Levels on the Interstate Migration of AFDC Recipients"	\$7,000
Uma Venkateswaran Physics	"Raman Spectroscopy of C ₆₀ Under Pressure"	\$6,600
Stuart Wang Mathematical Sciences	"Jacobian Conjecture and Related Problems"	\$5,700

RESEARCH GRANT AWARDS

Name	Title	Amount
Lettie Beckon Alston Music, Theatre & Dance	"Music Score and Parts Rendering for Oakland University Wind Ensemble"	\$ 850
Arthur Bull Chemistry	"The Relationship Between 13-ROH Dehydrogenase Activity and Cell Proliferation"	\$ 900
Laurie Eisenhower Music, Theatre & Dance	"New Choreographic Work"	\$ 625

RESEARCH GRANTS (continued)

Ronald Finucane History	"Medieval Childhood: Adult Responses to Death, Apparent Death, and Accidents in Village Children ca. AD 1300-1500"	\$1,000
Abraham Liboff Physics	"Proliferative Response in Human Lymphoma Cells to 60 Hz Magnetic Fields"	\$ 900
Barbara Mabee Modern Languages & Literatures	"Playful Resistance in the Word: Elke Erb's Poetry and Prose Texts"	\$ 900
Charlotte Stokes Art & Art History	"Palaces of the Mind: The Influence of Max Ernst's Early Life in Bruhl on His Later Works"	\$ 925
Richard Tucker History	"The Environmental Impact of American Planners on the Developing World's Water Resources"	\$ 900

SPECIAL PROJECT AWARD

Name	Title	Amount
Natalie Bell Cole English	NEH Seminar Supplement	\$ 500

MEADOW BROOK RESEARCH CONFERENCE GRANT

Name	Title	Amount
Michael Sevilla Chemistry	"Pathways to Radiation Damage in DNA"	\$3,000

RESEARCH SEMINAR SUPPORT

Name	Title	Amount
Lizabeth Barclay Business Administration Management/Marketing	"Managing Managers" with Clinton Longenecker	\$ 75
Lizabeth Barclay Business Administration Management/Marketing	"Current Issues in International Research" with Edwin Miller	\$ 75
Lizabeth Barclay Business Administration Management/Marketing	"Issues Surrounding Undergraduate Retention" with Cary Lichman	\$ 60
Lizabeth Barclay/ Al Lederer Business Administration	"Information Systems Downsizing" with Bill Doll	\$ 100
Marc Briod Education & Human Services/Human Development & Child Studies	"Qualitative Data Analysis and the Use of the Computer in Data Management" with Renata Tesch	\$ 200
Nicole Buffard-O'Shea Modern Languages & Literatures	"Seminar on Jean-Paul Sartre" with Anne Clancier	\$ 200
Rasul Chaudhry Biological Sciences	"NSF Funding Programs and Opportunities" with Dr. Philip Harriman	\$ 200
Rasul Chaudhry Biological Sciences	"Biochemical and Genetic Studies on s-Triazine Degradation of Bacteria" with Jeffrey S. Karns	\$ 200
Rasul Chaudhry Biological Sciences	"Promise and Potential of Marine Biotechnology" with Rita Colwell	\$ 200
Rasul Chaudhry Biological Sciences	"Differential Interaction of Bacteria and Viruses by Hydrogen Peroxide" with Samuel Farrah	\$ 200

RESEARCH SEMINARS (continued)

Kevin E. Early Sociology & Anthropology	"Alcohol, Drugs, and Society: A Social Learning Approach" with Dr. Ronald L. Akers	\$ 200
Ronald Finucane History	"War and Society in American History" with John Murrin	\$ 200
Sherman Folland Business Administration Economics	"Stochastic Frontiers and Other Approaches to Estimating Economic Efficiency" with Peter Schmidt	\$ 100
Sherman Folland Business Administration Economics	"The Rhetoric of Economics" with Donald McCloskey	\$ 200
Subramaniam Ganesan SECS/Computer Science	"The Development of Self Adapting Test System for Employees" with Chengqi Nie	\$ 100
Subramaniam Ganesan SECS/Computer Science	"Distributed Expert Systems on Ethernet" with Zeng Xianzhao	\$ 100
Egbert Henry Biological Sciences	"Plasmid Replication Control and Stable Inheritance" with Robert Rownd	\$ 155
Egbert Henry Biological Sciences	"Molecular Mechanism of an Anion Pump: The Plasmid Encoded Arsenical Resistance Operon" with Barry Rosen	\$ 155
Egbert Henry Biological Sciences	"Molecular Analysis of Biodegradative Microbial Community: Structure and Function" with Gary Sayler	\$ 200
Egbert Henry Biological Sciences	"Biochemical Genetics of Hydrogen Metabolism in <u>E. coli</u> " with Dr. Shanmugam	\$ 200
Edward Haworth Hoepner English	"The After-Life Poems of William Butler Yeats" with Helen Vendler	\$ 200
Mary Karasch History	"African Slavery in Latin America" with Franklin Knight	\$ 200
Mary Karasch History	"Moral Reflections on 1492" with James Axtell	\$ 200

RESEARCH SEMINARS (continued)

Mary Karasch History	"Latin American Women: Historical Perspectives" with Asunción Lavrin	\$ 200
Paul Ketchum Biological Sciences	"Nitrate Reduction in <u>Escherichia coli</u> " with John Rowe	\$ 200
Vincent Khapoya Political Science	"Rethinking America's Security in the Post-Cold War Era" with Maurice East	\$ 200
Naim Kheir Engineering & Computer Science Electrical & Systems	"Unified Approach to the Stability of Robust-Stability Problems" with Mohamed Mansour	\$ 100
John Klemanski Political Science	"Managing Local Government Change in the United Kingdom: Lessons for the United States" with Christopher Collinge	\$ 200
Barbara Mabee Modern Languages & Literatures	"Brecht Seminar for Faculty of Modern Languages and Literatures; Lecture in German for German Students on Performing Brecht Plays After Unification" with Heinz-Uwe Haus	\$ 200
Barbara Mabee Modern Languages & Literatures	"Women's Film Festival Seminar" with Tina McElroy Ansa	\$ 200
Barbara Mabee Modern Languages & Literatures	"Women's Film Festival Seminar" with Alile Sharon Larkin	\$ 200
Tadeusz Malinski Chemistry	"Nickel Carcinogenesis" with Dr. Kazimierz Kasprzak	\$ 200
James Ozinga Political Science	"Research on Albania and Romania" with Raymond Hutchings	\$ 200
Michael Riley Eye Research Institute	"RD Chick: A Cone Dominant Model of Inherited Retinal Dysfunction and Degeneration" with Susan Semple-Rowland	\$ 200

RESEARCH SEMINARS (continued)

Michael Riley Eye Research Institute	"The Biochemical Basis of Rod Outer Segment Light Response" with Ari Sitaranayya	\$ 200
Irwin Schochetman Mathematical Sciences	"Numerical Procedures for Diffusion Subject to Energy Specification" with John R. Cannon	\$ 200
Irwin Schochetman Mathematical Sciences	"Why should you believe the Jacobian Conjecture?" with Professor Arno van den Essen	\$ 200
Irwin Schochetman Mathematical Sciences	"Algorithms for Polynomial Real Root Isolation" with J. Johnson	\$ 200
Irwin Schochetman Mathematical Sciences	"On Counting Lattice Paths with Major Index and Descents" with S. G. Mohanty	\$ 200
Irwin Schochetman Mathematical Sciences	"Invariant Subspaces and Polynomials" with Per Enflo	\$ 200
Barkur Shastry Eye Research Institute	"Gene Expression in Retinal Dystrophies and Molecular Interaction of RPE and Photoreceptors" with Neeraj Agarwal	\$ 200
Andrei Slavin Physics	"Spin Wave Auto-Oscillations in Finite Size Ferromagnetic Samples" with Vladimir Cherepanov	\$ 200
Nalin Unakar Biological Sciences	"Calpain and Experimental Cataracts" with Thomas Shearer	\$ 200
Harold Zepelin Psychology	"Face and Brain in Human Emotion" with Robert Zajonc	\$ 155
Harold Zepelin Psychology	"Interpersonal Conflict in Social and Personal Development in Childhood" with Carolyn Shantz	\$ 155

INTERDISCIPLINARY PROJECT SUPPORT

Name	Title	Amount
Denis M. Callewaert/ Arthur Bull/Fazlul Sarkar/Chemistry & Virinder Moudgil Biological Sciences	"Role of Polyunsaturated Fatty Acids in Breast Cancer"	\$16,500
Diane R. Wilson/ F. Darlene Schott-Baer/ Nursing/ & Lawrence Lilliston/Psychology	"Validity and Reliability of Methodologies and Evaluative Tools for Assessment of Ischemic Heart Disease Profile Among Children of Disadvantaged Minorities"	\$ 4,500

ALUMNI CONFERENCE GRANTS

Name	Title	Amount
Marc Briod School of Education & Human Services Human Development/Child Studies	"Eleventh International Human Science Research Conference"	\$ 1,000
Mary Karasch History	"Discovery of America: Encounter of Three Cultures"	\$ 2,000

UNDERGRADUATE STUDENT RESEARCH GRANTS

Name	Title	Amount
Basel Abbasi Mechanical Engineering	"Study of Fuel Injection Systems for Small Engines"	\$ 295.40
Jennifer Baustert Biological Sciences	"An In Vivo Model for Studying Angiogenesis"	\$ 300.00
Janet Czeszewski Political Science	"A Study of Probation Violators in Oakland County, Michigan"	\$ 252.00
Sumi Dinda Biological Sciences	"Amiodarone-Potential for Light-Induced Toxicity for Retinal Pigment Epithelial Cells"	\$ 300.00

UNDERGRADUATE STUDENT RESEARCH GRANTS (continued)

Donna A. Kiehle Psychology	"The Effect of Psychological Separation on Quality of Life and Family Satisfaction in Late Adolescence"	\$300.00
Michael T. Olsen Biological Sciences	"Tests of Predicted Dispersal Patterns of Wood Frogs (<u>Rana sylvatica</u>)"	\$298.05
Panagiota H. Tsatsos Biochemistry	"Fatty Acyl-CoA Oxidase Activity Determination in Fibroblast Cells of Patients with Neonatal Adrenoleukodystrophy"	\$300.00
Bill D. Underwood Biochemistry	"Characterization of Progesterone Receptor from Mammalian Cardiac Tissue"	\$300.00

GRADUATE STUDENT RESEARCH GRANTS

Name	Title	Amount
Angela M. Bitterman Biological Sciences	"Comparative Growth and Mortality Rates of the Zebra Mussel, <u>Dreissena polymorpha</u> , From Two Sites in Lake St. Clair"	\$340.00
Mary Lynn Blackburn Health & Environmental Chemistry	"The Effect of Linoleic Acid Oxidation Products on Cellular Proliferation in the Cell Line HCT-116"	\$495.00
Elizabeth Bura Biological Sciences	"The Field Documentation and Adaptive Significance of Kin Recognition in Larval Wood Frogs (<u>Rana sylvatica</u>)"	\$495.00
Shen Cherng Medical Physics	"Effects of Extremely Low Frequency Magnetic Fields on Calmodulin-Dependent Phosphodiesterase Activity"	\$200.00
Christopher M. DeWitt Health & Environmental Chemistry	"In Vitro Determination of the Anaerobic Threshold"	\$500.00
Timothy J. Gustafson Biological Sciences	"The Loss of Specific DNA Sequences in <u>Drosophila melanogaster</u> "	\$500.00

GRADUATE STUDENT RESEARCH GRANTS (continued)

Michelle Lee Herman Biological Sciences	"Phosphorylation of Glucocorticoid Receptor from Mammalian Cardiac Tissue"	\$500.00
Pratima Pandey Biological Sciences	"Genotoxicity of PCBs and Their Metabolites in an Eukaryotic Genome"	\$500.00
Sarah Ann Rautio Biological Sciences	"Impact of Zebra Mussels, <u>Dreissena polymorpha</u> , on Growth of Macrobenthos, Yellow Perch, and Freshwater Drum in Enclosures"	\$325.00
Angela Whipple-Ellsworth Jennifer Walden Mary Klebba Physical Therapy	"A Comparison of the Analgesic Effects of Ice Massage and Brief Intense Transcutaneous Electrical Nerve Stimulation (B.I.T.)"	\$300.00