

UNIVERSITY RESEARCH COMMITTEE

ANNUAL REPORT

FISCAL YEAR 1995



**University Research Committee
Annual Report
1994-95**

August 1, 1995

Dear Colleagues:

This annual report includes a financial summary and itemized description of projects funded by or through the University Research Committee during the 1994-95 operating cycle.

As this report indicates, the majority of the Committee's time is spent on the distribution of the contract research funds. Supplemental funding was provided by the Oakland University Foundation and the Alumni Association. When late notification of discontinued support for the Alumni Conference posed a problem for the Committee, Interim President Russi provided assistance in authorizing support for one final year (1994-95). A balance of \$5,501.20 is being carried forward into the next University Research Committee operating cycle. This higher than anticipated figure is the result of a fellowship award being returned by a recipient who received late notification of extramural funding for the same project.

Funding for a President's Colloquium Series was approved in academic year 1993-94. This year the University Research Committee developed guidelines and selected speakers for the first series, including four programs that are scheduled to run during 1995-96. The President's Colloquium Series will feature programs on faculty research for a general university audience and interested off-campus participants.

Also this year, during deliberations for the Research Excellence Award, the University Research Committee experienced difficulty in comparing new faculty members who have outstanding research records to faculty members with many more years of research accomplishments. The Committee, therefore, submitted a proposal to Interim President Russi, recommending the establishment of a New Investigator Research Excellence Award that would recognize significant achievements of junior faculty members. We were delighted to receive notification of support for this award for a two-year trial period. This New Investigator Research Excellence Award will be aimed at individuals who are generally within ten years of receiving a terminal degree in their field. The Research Excellence Award will continue as recognition for a book or collection of related publications and presentations, career achievements of senior faculty, or significant scholarly contributions in a field.

It's been a pleasure serving as Chair for this important Committee and I want to acknowledge the efforts of all the members of the University Research Committee for their service during my term as Chair: **Richard Campbell**, Linguistics; **Subramaniam Ganesan**, School of Engineering and Computer Science; **Randy Hansen**, Psychology; **Susan Hawkins**, English; **Don McCrimmon** (*ex officio member*), Office of Grants, Contracts and Sponsored Research; **Mohan Pisharodi**, School of Business Administration; **Renate Rohde**, School of Education and Human Services; **Barry Turett**, Mathematical Sciences; **Nalin Unakar**, Biological Sciences; and **Geoffrey Wawro**, History. In addition, I'd like to acknowledge the efforts of **Robert Schwartz**, School of Education and Human Services, and **Jon Yates**, Biological Sciences, who served as temporary replacements for Renate Rohde and Nalin Unakar, during the Fall semester.

Darlene Schott-Baer
Chair, University Research Committee

**UNIVERSITY RESEARCH COMMITTEE
FISCAL YEAR 1995 AWARD SUMMARY**

Total Allocation	\$ 130,000.00
Loan Reimbursement (year 2 of 5)	1,900.20

Total URC Budget	<u>\$ 131,900.20</u>
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Fellowships (16 awards @\$6,500 each)	\$ 104,000.00
Bonus (added to Reserve)	4,000.00
Fringe Benefits	2,000.00
Grants	8,223.00
Special Project Awards	5,176.00
Meadow Brook Conference Grant*	<u>3,000.00</u>

Total Expenditures	\$ 126,399.00
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Balance	\$ 5,501.20
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*The award recipient(s) in this category also may receive in-kind support from Meadow Brook Hall.

SUPPLEMENTAL EXPENDITURES

Alumni Association Support:

Undergraduate Student Research Grants	\$ 750.00
Graduate Student Research Grants	\$ 1,845.00
Alumni Conference Grant	\$ 2,905.00

O.U. Foundation Support:

Research Excellence Award	<u>\$ 2,500.00</u>
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Total Supplemental Expenditures	\$ 8,000.00
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Compiled 6/30/95

FELLOWSHIP AWARDS

Name	Title	Amount
Kevin Andrews Mathematical Sciences	"Mathematical Models for the Frictional Contact of an Elastic Beam"	\$6,500.00
Charles Ching-An Cheng Mathematical Sciences	"Solving Polynomial Systems with Computers"	\$6,500.00
Natalie Bell Cole English	"'That Delicious Traveller's Trance': Dickens' Uncommercial Traveller and Our Mutual Friend"	\$6,500.00
Brian Connery English	"Authority and Political Theory in the Works of Jonathan Swift"	\$6,500.00
Augustin Fosu School of Business Administration	"External Debt and Economic Growth in Developing Economies: Evidence from Sub-Saharan Africa"	\$6,500.00
Robert Goldstein Political Science	"Limits in the 'Land of the Free': Political Repression in Modern America"	\$6,500.00
Sandra Kingan Mathematical Sciences	"The Structure of Binary Matroids"	\$6,500.00
Emmett Lombard Political Science	"Environmental Protection Under NAFTA"	\$6,500.00
Sean Farrell Moran History	"The Idea of Hope and Irish Republicanism"	\$6,500.00
Dale Nesbary Political Science	"Capital Budgeting and Finance Project"	\$6,500.00
Guohua Pan Mathematical Sciences	"Test Whether One Population with Umbrella Ordering Reaches Its Peak Earlier Than Others"	\$6,500.00
Christina Sieloff School of Nursing	"Testing the Measurement of Departmental Power"	\$6,500.00
Gopalan Srinivasan Physics	"Studies on Ultrahigh Magneto-Resistance in Manganese Based Oxides"	\$6,500.00

Name	Title	Amount
Sze-kai Tsui Mathematical Sciences	"Application of Differential Geometry to Robotics"	\$6,500.00
Karen Wachsmuth Music, Theatre & Dance	"A Selected Bibliography of Twentieth-Century Hungarian Choral Music"	\$6,500.00
Yang Xia Physics	"Nuclear Magnetic Resonance Imaging of Cartilage at Microscopic Resolution"	\$6,500.00

RESEARCH GRANT AWARDS

Gary Barber School of Engineering & Computer Science	"The Effect of Plateau Surface Topography on Friction"	\$ 1,000.00
Mukesh Bhargava School of Business Administration	"A Study of Psycholinguistic Elements and Its Correlates With Effectiveness in Outdoor Advertising"	\$ 960.00
Manohar Das School of Engineering & Computer Science	"Imaging Equipment for Ongoing Research in the Areas of Image Compression and Automated Microbiota Classification"	\$ 990.00
Gadis Dillon Lizabeth Barclay School of Business Administration	"Turnover and Burnout in Accounting Chairs: A Longitudinal Study"	\$ 950.00
Laurie Eisenhower Music, Theatre & Dance	"MGM"	\$ 1,000.00
Sheldon Gordon Biological Sciences	"The Role of Microfilaments in Chromosome Movement"	\$ 1,000.00
William Keane Eric Follo School of Education & Human Services	"Departing Superintendents: Do They Suffer Degradation of Authority That is Detrimental to the Organization?"	\$ 623.00
Gregory Patterson Music, Theatre & Dance	"Petosky Project"	\$ 1,000.00

Name	Title	Amount
Richard Tucker History	"The Evolution of the Wildlands Conservation Movement in India"	\$ 700.00

SPECIAL PROJECT AWARDS

Natalie Bell Cole English	"Women and Work in Contemporary Film"	\$ 955.00
Kenneth Harmon Chemistry	"Laboratory Technician Support"	\$ 1,000.00
Ravi Khattree Mathematical Sciences	"SAS System for Multivariate Analysis"	\$ 1,000.00
Lettie Beckon Alston Music, Theatre & Dance	"Anxiety for Orchestra"	\$1,000.00
Eric Follo School of Education & Human Services	"Doctoral Program in Educational Administration: Expert Advisory Conference"	\$ 224.00
Daniel Ring Kresge Library	"The Origins and Early Years of the Billings Public Library"	\$ 997.00

MEADOW BROOK RESEARCH CONFERENCE GRANT

Virinder Moudgil Biological Sciences	"Steroid Receptors in Health and Disease"	\$3,000.00
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ALUMNI CONFERENCE AWARDS

Fay Hansen-Smith Biological Sciences	"Cardiovascular Research Forum"	\$ 1,655.00
Joseph Hovanesian School of Engineering & Computer Science	"Michigan Teachers of Mechanics Conference"	\$ 650.00

Name	Title	Amount
Jacqueline Scherer Sociology & Anthropology	"Liberal Arts and Vocational Demands: Maintaining Intellectual Integrity"	\$ 600.00

UNDERGRADUATE RESEARCH GRANTS

Edward Aron-Lang Haass	"Angiotensin II Induced Angiogenesis"	\$ 250.00
Martin Levesque	"Microscopic Visualization of <i>Brugia</i> <i>Microfilariae</i> in the Blood Meal of Vector Mosquitoes"	\$ 250.00
Mary Ellen Scheer	"The Effects of Basic Fibroblast Growth Factor on Blood Vessels and Mast Cells"	\$ 250.00

GRADUATE RESEARCH GRANTS

Kathleen Booker	"The Tapestry of Personality Types and Learning Styles"	\$ 55.00
Timothy Judd	"Colony Defense Against Vertebrate Predators by Social Wasps (<i>Polistes fuscatus</i>)"	\$ 400.00
Nidhi Khattree	"Immunoanalysis of Progesterone Receptor in T47D Human Breast Cancer Cells"	\$ 400.00
Rachelle Martin	"The Effects of a Muscle Balance Training Program on Archery Target Shooting Performance"	\$ 300.00
Matthew Pyenta	"Role of Anti-mosquito Antibodies in the Transmission of <i>Brugia malayi</i> "	\$ 400.00
Lester Westad	"Effects of Altered Plumage on Sexual Selection in the Northern Flicker (<i>Colaptes</i> <i>auratus</i>)"	\$ 290.00

UNIVERSITY RESEARCH COMMITTEE

1994-95

Faculty Representatives

Richard Campbell
Subramaniam Ganesan
Ranald Hansen
Susan Hawkins
Donald McCrimmon**
Rammohan Pisharodi
Renate Rohde*
Darlene Schott-Baer (Chair)
J. Barry Turett*
Nalin Unakar
Geoffrey Wawro

Academic Units

Department of Linguistics
School of Engineering & Computer Sciences
Department of Psychology
Department of English
Grants, Contracts and Sponsored Research
School of Business Administration
School of Education & Human Services
School of Nursing
Department of Mathematical Sciences
Department of Biological Sciences
Department of History

* Graduate Council Representative

** Director of Grants, Contracts and Sponsored Research and *ex officio* member of the University Research Committee