# UNIVERSITY RESEARCH COMMITTEE



# **ANNUAL REPORT**

# **FISCAL YEAR 2005**



#### University Research Committee Annual Report July 1, 2004– June 30, 2005

This annual report includes a financial summary, a summary of awards by unit and an itemized description of projects funded by or through the University Research Committee during the 2004-2005 operating cycle. As this report indicates, the majority of the Committee's time was spent on the distribution of contract research funds. The Committee spent approximately \$207,517 to support faculty and student research endeavors, including \$14,000 in supplemental funding provided by the Office of the President.

The seventh year of the President's Colloquium Series was presented in March. The speaker was **Hoda Abdel-Aty-Zohdy**, Department of Electrical and Systems Engineering. The colloquium featured a program on Professor Abdel-Aty-Zohdy's research. We are pleased that continued support is being provided by the President's office for this important series.

We are also grateful for Dr. Russi's continued support for the New Investigator Research Excellence Award and Research Excellence Award competitions. These awards provide a mechanism for the University community to recognize and celebrate the accomplishments of junior faculty, along with faculty members who have many more years of research experience. This year the New Investigator Research Excellence Award went to **Xiangqun Zeng**, Department of Chemistry, and the Research Excellence Award went to **Maria Szczesniak**, Department of Chemistry.

This was a particularly busy year for the URC. In addition to the time consuming work of evaluating proposals, this year the URC was asked to develop a method for distributing the indirect cost return (ICR) money allocated through the last contract negotiation. This task required significant time and effort, since the AAUP's interpretation of the contract language differed from that of the Provost. Furthermore, the URC took on the task of rewriting the URC Guidelines, something that had not been done in several years. Thus, for 2005-2006 the Guidelines have been revised, are up-to-date, and include new programs that may be used in distributing the ICR monies. Starting in August 2005, most proposals will be submitted on-line through the Research Application Manager.

I wish to express my great pleasure in serving on this important Committee and to thank all the members for their service during my term as Chair: Ronald Olson, (ex-officio member), Interim Vice Provost for Research; Amanda Bryant-Friedrich, Department of Chemistry; Charles Cheng, Department of Mathematics and Statistics; Natalie Cole, Department of English; Eric Follo, Department of Educational Leadership; Lawrence Lilliston, Department of Psychology; Charles Marks, Department of Exercise Science, Sarah Newton, School of Nursing; Balaji Rajagopalan, Department of Decision and Information Sciences; and Andrei Slavin, Department of Physics.

### UNIVERSITY RESEARCH COMMITTEE FINANCIAL SUMMARY FISCAL YEAR 2005 @ 6/30/2005

	Initial	Final
Contract Allocation	192,000	200,000
Student Award Allocation	4,000	4,000
URC ALLOCATION	196,000	204,000
Balance Carry Forward	-	7,000
Recovery From Prior Years Unused Award	-	41,785
TOTAL	-	48,785
Research Fellowships	173,131	173,131
Faculty Research	4,800	4,800
Faculty Special Projects	4,119	4,119
Student Research	3,107	3,107
Student Travel	4,400	4,400
Meadow Brook Hall Conference Support	3,000	3,000
Grant Writing Seminar	2,000	-
Books, Reprints, Page Charges, etc.	960	960
TOTAL URC EXPENDITURES	195,517	193,517
BALANCE	483	59,268

#### **OFFICE OF THE PRESIDENT CONTRIBUTIONS**

TOTAL URC & PRESIDENT CONTRIBUTIONS	210,000	266,785
TOTAL ADDITIONAL BUDGET CONTRIBUTIONS	14,000	14,000
Research Excellence Award	2,500	2,500
New Investigator Research Excellence Award	1,500	1,500
President's Colloquium Series	10,000	10,000

# AWARDS BY UNIT 2004-2005

UNIT	\$ Awarded by Unit	% OF TOTAL
Eye Research Institute	\$8,500	4.48
School Of Business Administration	\$8,900	4.69
School of Engineering & Computer Science	\$10,000	5.27
School of Health Sciences	\$14,531	7.66
College of Arts & Sciences		
Biological Sciences	\$2,100	1.11
Chemistry	\$8,500	4.48
English	\$17,500	9.23
History	\$18,200	9.60
Mathematics & Statistics	\$35,500	18.72
Modern Languages & Literatures	\$17,000	8.96
Music, Theatre & Dance	\$12,919	6.81
Physics	\$8,500	4.48
Political Science	\$8,500	4.48
Psychology	\$800	0.42
Sociology & Anthropology	\$8,500	4.48
School of Education & Human Services	\$9,700	5.11
TOTAL \$	\$189,650	100

# AWARDS BY CATEGORY

# FELLOWSHIP AWARDS

Name	Department	Proposal Title	Amount
Dae-Kyoo Kim	Computer Science & Engineering	"Checking Design Pattern Conformance of Software Models"	\$8,500
Robert Goldstein	Political Science	"The Attorney General's List of Subversive Organizations: The Official Government Blacklist During the McCarthy Era"	\$8,500
Gary Shepherd	Sociology & Anthropology	"Channeling Prophecies in a Communal Religious Organization"	\$8,500
Laszlo Liptak	Mathematics & Statistics	"Graphs with a Critical Facet of Defect 3"	\$8,500
Barry Winkler	Eye Research Institute	"Cone Photoreceptor Cell Function and Metabolism"	\$8,500
Ferman Chavez	Chemistry	"The Role of Metals in Cupin Metalloproteins"	\$8,500
Eileen Johnson	Educational Leadership	"Improving Quality of Interaction: Use of IPR with School Administrators During Post- Observation Feedback Sessions with Teachers & Staff"	\$8,500
Jennifer Law- Sullivan	Modern Languages & Literatures	"The Novelogue: Women's Writing & Genre in the 19th Century - 'George Sand's Letters d'un Voyageur & Isidora read as Novelogues'"	\$8,500
Christopher Warley	English	"Uncouth Milton"	\$8,500
Kasaundra Tomlin	Economics	"Domestic Firms Profits and Administered Trade Protection: Unintended Consequences"	\$8,500
Jeffrey Insko	English	"Frederick Douglass & the Anachronistic Self"	\$8,500
Sara Chapman	History	"Growing Families in New France: French Colonies in the Great Lakes, 1620s-1750s"	\$8,500
Derek Hastings	History	"Race & Religious Identity: Catholicism, Nationalism & the Early Nazi Movement in Munich, 1919-1924"	\$8,500
Ingrid Broszeit- Rieger	Modern Languages & Literatures	"Restructuring Classism as Innovation in Goethe's 'The Roman Carnival'"	\$8,500
David Kidger	Music, Theatre & Dance	"A Documentary Biography of the Composer Adrian Willaert (ca. 1490-1562)"	\$8,500
Barry Turett	Mathematics & Statistics	"The Fixed Point Property in Super-Reflexive Banach Spaces"	\$8,500
Serge Kruk	Mathematics & Statistics	"A flow Model & Approximation Algorithm"	\$8,500
Cathy Larson	Physical Therapy	"Gait Initiation from Standing & Sitting in Healthy Young, Healthy Elderly, and Persons with Parkinson's Disease, Multiple Sclerosis, or Cerebral Vascular Accident"	\$8,500
George Martins	Physics	"Study of Long-Range Interactions Between Quantum Dots: Application to Quantum Computers"	\$8,500
Wen Zhang	Mathematics & Statistics	"Evolution of Single Crystals in Three- Dimension with Anisotropic Surface Free Energy"	\$8,500
		TOTAL	\$170,000

## SPECIAL PROJECT AWARDS

Name	Department	Proposal Title	Amount
Laurie Eisenhower	Music, Theatre & Dance	"New York Performance"	\$1,419
Baruch Cahlon	Mathematics and Statistics	"Asymptotic Stability of Higher Order Delay Differential Equations"	\$1,500
Todd Estes	History	"The Jay Treaty Debate, Public Opinion, and the Evolution of Early American Political Cultural"	\$1,200
		TOTAL	4,119

## FACULTY RESEARCH

Name	Department	Proposal Title	Amount
Kathleen Galloway	Physical Therapy	"A Comparison of the Manu and Futuro Hand Braces in Patients with Carpal Tunnel Syndrome"	\$1,200
Melodine Kondratek	"Professional Portfolio Use by Physical Therapists in Michigan"	"Spinal Mobility of Adolescents: A Normative Study"	\$1,200
Mary Lose	Reading and Language Arts	"A Comparison of Two Suburban School Districts' first Grade Students' Reading Acquisition"	\$1,200
Kristine Thompson	"Professional Portfolio Use by Physical Therapists in Michigan"	"Professional Portfolio Use by Physical Therapists in Michigan"	\$1,200
		TOTAL	\$4,800

## MEADOW BROOK HALL CONFERENCE GRANT

Name	Department	Proposal Title	Amount
Jacqueline Wiggins	Music, Theatre & Dance	"The Conference on Music Learning & Teaching at Oakland University"	\$3,000
		ΤΟΤΑ	AL \$3,000

### STUDENT RESEARCH AWARDS

Name/Dept.	Department	Proposal Title	Amount
April Clark	Biological Sciences	"Expression Analysis of Two Novel Paraflagellar Rod Domain Genes Found in Trypanosoma cruzi"	\$500
Cari McClellan	Physical Therapy	"Case Study of the Effectiveness of Using a Strap with Self-Mobilization to Maintain Rotational Range of Motion Gains Between Treatments for Patients Diagnosed with Cervical Spondylosis"	\$500
Tonya Smith	Physical Therapy	The Effects of an Eight-Week Unilateal Proprioceptive Balance Training Program on the Contralateral Lower Extremity in Healthy Female High School Aged Athletes	\$500
Mari Stewart	Physical Therapy	"Working Title/Effectiveness of Speed Dependent Partial Body Weight Supported Treadmill Training in Individuals with Hemiparesis Post- Stroke"	\$500
Christina Stieve	Physical Therapy	"Incidence & Reasons for Non- Compliance of 13-18 Year Olds with Chronic Disabilities Receiving Physical Therapy with a Home Exercise Program"	\$307
Kamakshi Subramaniam	Computer Science & Engineering	"Promoting Student Achievement with the Course Objective Manager"	\$300
Andrea Vinco	Physical Therapy	"The Effects of an Upper Extremity Exercise Program on Lymphedema in Women Post-Sentinel Lymph Node Dissection"	\$500
		TOTAL	\$3,107

## STUDENT TRAVEL AWARDS

Name/Dept.	Department	Proposal Title	Amount
Andrew Baker	Decision & Information Sciences	"Drivers of Performance and Satisfaction with Global IT Solution Providers: A Conceptual Framework"	\$400
Daniel Brown	English	"The Scapegoats of Victorian London	\$500
Kathleen Delaney	Biological Sciences	"Lipid Raft Proteins from Human Lens Epithelial Cells (HLECs)"	\$400
Brooks Gross	Systems Engineering	An Examination of the Effect of an AC Pulsed Electric Field on Cell Mortality in SWLA-2 Hybridomas	\$400
Ardit Kacorri	Biological Sciences	"Selective Enrichment of Oligodentrocytes Derived from Mouse Embryonic Stem Cells"	\$400
Sachin Kandlikar	Biological Sciences	An Examination of the Effect of Decaying Exponential Pulse Electric Fields on Cell Mortality in Murine Spleenocytes, Hybridomas, and Human Natural Killer Cells	\$400
Xuan Li	Computer Science & Engineering	"Inverting Abstract Unification of Set- Sharing"	\$400
Qi Lu	Electrical & Systems Engineering	"Performance Analysis for Optical Wireless Communications Systems Using Subcarrier PSK Intensity Modulation Through Turbulent Atmospheric Channel"	\$400
Tara McIntosh	Psychology	"The Effect of Working Memory Load on Transitive Inference"	\$400
Natalie Obrecht	Psychology	"Anger Inferiority Effect Demonstrated in Both Crowd & Single-Face Presentations"	\$400
Adrian Vasquez	Biological Sciences	"Growth of Embryonic Stem Cell Derived Neural Progenitors in 3- Dimensional Biodegradable Scaffold"	\$400
		TOTAL	\$4,500