

THE UNIVERSITY OF NORTH CAROLINA GREENSBORO

Inside This Issue Northorce



Dr. Brad Bartel Associate Provost for Research Dean of the Graduate School

World economy...fast track approval...volatile Asian markets...
NAFTA...service sector; each day in the news we are inundated with these and hundreds of other terms as robust and changing economic conditions exists within the United States, marking for many the most prosperous period in decades.

The worldwide economic turbulence makes this issue of *Minerva* on Jobs and the Workforce very timely. The research reports within this issue cover a wide range of project by the UNCG faculty. We hope you find them of interest.

A major obligation of universities is to prepare the future work force. Related to job placement or advancement, it has become clear during the past two decades that the master's degree is the degree of choice for much of the mid-level work sector. The need for focused and applied forms of master's education, especially in a rapidly changing technological world has spawned a growth industry in higher education. A university has an obligation to review continuously and to change its inventory of degrees so that it keeps pace with work force need and modernity. UNCG is no exception to this change, and has recently implemented, or is planning new master's degrees that are on the leadingedge of this change. During this spring 1998 semester, we will take our first students into a Master of Science in Information Technology and Management; the first such master's degree in North Carolina. There is a

great demand for this degree. This will be followed in the fall with a Master of Science in Computer Science, and then within the next two years, a Master of Science in Genetic Counseling; an area of great need nationally.

This winter issue of *Minerva* also presents the fiscal year report on contract and grant activity for the previous fiscal year. UNCG has been doing very well in the competitive arena of research support. Our awards and expenditures have increased, as have the federal and health-related support.

I want to remind the reader that we have space to include only a select portion of faculty who have received contracts and grants.

space to include only a select portion of faculty who have received contracts and grants. We give you a sampling by broad discipline areas of the diversity of research conducted at UNCG.

This issue of *Minerva* incorporates a new

This issue of *Minerva* incorporates a new feature into the main articles. Much of the research activity of any university, UNCG included, is conducted with the assistance of graduate students. These research assistants are integrated within the fabric of the project from inception, and become partners in the enterprise, doing data collection, analysis and dissemination of results. Some of the articles in this and future *Minerva* issues will include a sidebar that presents a snapshot of a student's contribution to a project, and what it has meant to the student participating. We know you will appreciate this new feature.

Enjoy this issue of *Minerva*. The next issue (summer 1998) will be on *The Environment*.



#### **MINERVA**

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THE UNIVERSITY OF NORTH CAROLINA



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CONTENTS

Page 2 North Carolina Child Care Corps
Innovation leads to classroom efficiency

Page 4 Evaluation of Eden Alternative
How a new program reduces staff turnover

Page 6 Global Business Center
A center with a vision of world economy

Page 8 Working Women of the Early 1900s

Standing up for their rights

Page 10 Award Listings

Selected FY97 research awards

Page 13 Awards & Expenditures

Charting research activity

On the cover: William Gropper, *Bowery*, 1929, lithography on paper Gift of Mr. Sam Krasney, Weatherspoon Art Gallery, UNCG, 1981

### THE NORTH CAROLINA CHILD CARE CORPS

#### SHOWS HOW TO ADDRESS A NEED EFFECTIVELY



Dr. James Clotfelter Vice Chancellor, Administration and Planning



Dr. Deborah Cassidy Assistant Professor, Family Studies and Human Development

Dr. James Clotfelter and Dr. Deborah Cassidy have designed and implemented a model program that improves early child-hood education, a pressing need in North Carolina and across the nation. It also gives young men and women a chance for full-time service to meet state needs.

Dr. Clotfelter is Vice Chancellor for Administration and Planning at UNCG. He was chair of the project. Dr. Cassidy, a faculty member in the Department of Human Development and Family Studies, was project director.

Working with Gov. James Hunt's Smart Start initiative, they established, oversaw, and evaluated the North Carolina Child Care Corps. It had the dual mission of providing an opportunity for youth service while improving the quality of early childhood education in the state. At the completion of ten months of service, project volunteers were awarded more than \$4,000 toward their college education.

As a demonstration project, the Child Care Corps did its job well, exceeding projected benchmarks. Eli Segal, chair of the Partnership for National Service, known as Americorps, called the NC Child Care Corps truly groundbreaking. Americorps funded the project for three years. The project filed its final report this past August.

"We created, in cooperation with Smart Start, a national model," said Dr. Clotfelter. The idea for the Child Care Corps project grew from a study Dr. Clotfelter did with a grant from the Z. Smith Reynolds Foundation of Winston-Salem. He set out to design a youth service program in North Carolina similar in spirit to the Peace Corps - a voluntary public service program that involved low pay and hard work yet would attract young North Carolinians to become involved. Dr. Clotfelter, a political scientist, analyzed three

areas in which such a program might prove effective: environmental and conservation projects, early childhood education projects, and adult illiteracy. "We found that the most critical need in the state in terms of volunteer services was early childhood education."

Professor Dale Farran, Professor Cassidy, and Dr. Clotfelter then set about designing a model for a statewide, youth service program to address this need. The program was up and running by 1994. It recruited thirty-five high school graduates, ages 17 to 24, who were willing to work with small children over a ten-month period.

After a month of training at UNCG, they were assigned to five Smart Start sites:
Caldwell County, Cumberland County;
Davidson County; Halifax County; and
Region A in western North Carolina, which included Cherokee, Clay, Graham, Haywood,
Jackson, Macon, and Swain counties and the
Qualla Boundary Reservation of the Eastern
Band of the Cherokees. The program spanned the state from east to west its first year.

The work of the volunteers was based on the premise that high quality child care is essential to early childhood development. "Research confirms that brain stimulation is absolutely critical in early childhood development," Dr. Cassidy said. "It's a situation where more is better." Corps members went to counties at the invitation of local Smart Start programs. They were placed in classrooms to improve staff-child ratios. In North Carolina, the state mandated staff-child ratios are high compared to other states. Corps members did not replace the classroom teachers at the Smart Start sites. They supplemented their efforts. They were an extra pair of hands.

"Corps members freed the lead teachers from the more mundane tasks, enabling them to do more activities with the children," Dr. Cassidy said. "We predicted that there would be a gain of 10 percent more activities available for children in the classrooms. In evaluating the project, we computed the number of activities provided before and after Corps members began their term of service. It was better than we hoped. We actually saw a gain of 67 percent in the number of activities that teachers were able to offer because Corps members were in their classrooms."

One teacher said that not only did she see an increase in the number of small group activities that she was able to provide for her children in a week, she also saw a 100 percent increase in the number of large group activities that she was able to provide.

Dr. Cassidy said teacher surveys also showed that the presence of a Corps member also affected classroom discipline. "Sixtyseven percent indicated that having an extra hand in their room reduced the number of discipline problems in the class."

Dr. Cassidy said Corps members worked collaboratively with teachers who already were committed to high quality in the classroom. "The Corps members were not trained to do it on their own." By all measures, she said, the approach worked.

Corps members worked forty hours a week in the classroom. Many worked outside the classroom, too, as community volunteers. As a volunteer with a community arts council, one Corps member performed in a play and was stage manager for a children's play. Another volunteered at a county library two nights a week, reshelving books and helping out at the circulation desk. Several volunteered as tutors.

The Child Care Corps demonstrated that the issue of early childhood education can be addressed with imagination and effectiveness.



Dr. Jim Clotfelter (l), conferring with Dr. Deborah Cassidy (r)

"I WAS PART OF SOMETHING THAT WAS HAVING A REAL IMPACT..."

As a graduate assistant for the NC Child Care Corps project for two years, Alice Hall collected data for evaluations and assisted with the training and supervision of Corps volunteers. She is a candidate for the PhD degree in the Department of Human Development and Family Studies. Her area of concentration is child care. "It was an opportunity to apply research skills I have learned," she said, "but more than that, it was an enriching experience - visiting the sites, meeting the volunteers. I was part of something that was having a real impact on people's lives."

#### AN EDEN ALTERNATIVE

#### HELPS NURSING HOMES BECOME BETTER PLACES TO WORK

Three faculty members in the School of Nursing are evaluating an innovative program that seeks to improve the quality of life for people living in nursing homes and to reduce staff turnover.

Dr. Beth E. Barba, Dr. Nancy F. Courts, and Dr. Anita S. Tesh are comparing three nursing homes in North Carolina that use the Eden Alternative with three that don't. The Eden Alternative integrates pets, plants, and children into the lives of nursing home residents. The North Carolina Division of Facility Services is awarding grants to nursing homes that want to adopt the Eden Alternative.

The premise is that people live healthier and happier lives in a homelike atmosphere as opposed to an institutional setting. Supporters of this approach make the additional claim that it addresses and will help solve a major problem at nursing homes

Drs. Beth E. Barba (1), Anita S. Tesh (m), and Nancy F. Courts (r)



nationwide — staff turnover on the level of fast-food restaurants.

Dr. William H. Thomas of Sherburne, New York, developed the idea about six years ago. After graduating from Harvard Medical School, he was named by the Mead Johnson Foundation as one of the top residents in family medicine and geriatrics in the United States.

As medical director of a nursing home, Dr. Thomas was, he said, appalled at what he saw. Patients were lonely, isolated, and bored. An apathetic staff attended them in a halfhearted manner. How could the situation be salvaged?

One day Dr. Thomas had one of his four children with him as he made his rounds in the nursing home. He was struck by the positive reaction of patients and staff. This incident stimulated ideas for the concept of the Eden Alternative. Introduce hamsters, birds, dogs, and cats as pets. Invite children in afterschool programs, summer camps, and day care programs to visit regularly. Provide indoor plants for residents to care for. Plant gardens. Create teams among the staff for care and decentralize decision-making. Reorganize the management of the facility around the needs of the patients.

More than two hundred nursing homes in the United States and Canada have adopted the program.

Dr. Barba, Dr. Courts, and Dr. Tesh are completing a pilot study of the measurable effects of "Edenizing" the nursing home environment. They plan to use data from this preliminary study to bolster a funding proposal for a comprehensive evaluation of the Eden Alternative in North Carolina.

The thrust of the approach is engagement as a way to combat loneliness, helplessness, and boredom among residents and to engender caring involvement among staff. Nursing

homes are to be perceived as habitats for humans rather than institutions for the frail and elderly. From the notion of vibrant, vigorous habitat sprang the name, Eden Alternative.

"Part of Edenizing is having residents participate in what's going on around them," Dr. Barba said. "If you've brought in children and animals as companions, you've taken care of boredom. And if residents are helping to care for their surroundings, you've taken care of helplessness."

Homes that have "Edenized" appear to experience decreases in resident death rates, declines in the monthly average of drug costs for residents, lower numbers of infections and bed sores, and reduced staff turnover. The three researchers are collecting data in these areas and others.

They also are interviewing with nursing home residents, their family members, and staff to assess loneliness, depression, morale, and perceptions of nursing homes.

However, Dr. Barba said, "Edenizing" is not as simple as bringing in dogs and plants. It requires a lot of staff education because it challenges traditional methods of nursing home management and changes the way the staff functions.

The primary, day to day care givers at nursing homes are entry-level staff. It is hard, demanding work. Residents may have cognitive disabilities and impaired bodily functions. Some may have to be spoon-fed. The pay is often minimum wage. A job turnover rate of 100 percent over six months is not uncommon.

Dr. Tesh recounted a case of a foreign-born nursing assistant reporting that she planned to work at the nursing home long enough to improve her English to the point that she could get a job at Burger King. It paid more.

The golden rule among the Eden Alternative is do unto staff as you would have them do unto residents. Be attentive to their needs. Treat them with respect and considera-

This translates to provision of child-care facilities for nursing home staff, most of whom are women. Providing help with transportation to and from work. These women tend not to own cars. Be flexible and understanding with schedules. They're usually raising a fami-

The researchers hope to finish their pilot study by spring 1998. They would like to follow up with a larger study that looks at "Edenizing" nursing homes across North Carolina.

A UNCG faculty member since 1989, Dr. Barba has conducted extensive research on the human health implications in the relationship of humans and animals. Before joining UNCG's faculty, she spent ten years in critical care nursing and another decade teaching at institutions in New Jersey and New York. She received her doctorate from New York University.

Dr. Courts joined the nursing faculty in 1990. She has conducted extensive research on psychosocial adjustment of patients with chronic conditions and their families. Currently, she is investigating the care giving roles and how care givers are chosen. She received her doctorate from UNCG.

Dr. Tesh has taught at UNCG since 1991. She has worked as a nurse in Winston-Salem and Monroe, and has been a clinical consultant at Lincoln Community Health Center in Durham. She has conducted research on outcomes evaluation, including outcomes of alternative outreach intervention s to Medicaid recipients. Dr. Tesh received her doctorate from UNCG.

"IF RESIDENTS

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HELPLESSNESS'

4 • MINERVA: Research at UNCG

### CENTER FOR GLOBAL BUSINESS EDUCATION AND RESEARCH:

EDUCATING THE NEW WORKFORCE



Dr. Riad Ajami
Director, The Center for
Global Business Education
and Research

From Dr. Riad Ajami's desk on the fourth floor of the Joseph M. Bryan School of Business and Economics, there is a perspective he seeks to share and promote with students and the business community of North Carolina. It's a wide-angled vision of a seamless domestic and global economy.

Dr. Ajami is director of the Center for Global Business Education and Research and the Charles A. Hayes Distinguished Professor of Business. The Center is a new unit of the Bryan School. It promotes international business competency, fosters and disseminates research on global business issues, and creates boundary-spanning outreach programs to the business community. Dr. Ajami is its first director. He is the first at UNCG to hold the title of Charles A. Hayes Distinguished Professor of Business.

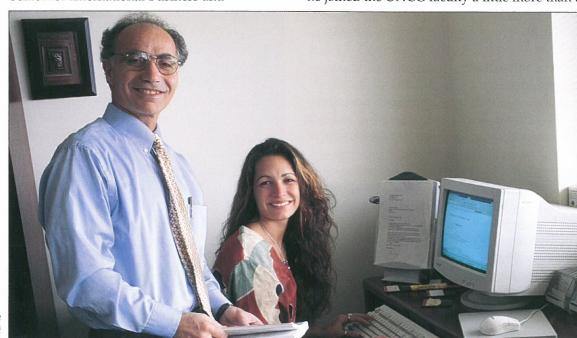
He is uniquely qualified for the role. Dr. Ajami came to UNCG from the Rochester Institute of Technology. He held the Benjamin Forman Chair as Professor of International Business at Rochester. He was director of the Center for International Business and

Economic Growth there.

"I believe tomorrow's business managers will be the ones who can operate in transnational and multicultural environments and economies," Dr. Ajami said. "We are putting the building blocks in place that will assure our graduates of our program of having the requisite proficiencies and competencies for managing in an international environment."

In addition to the Rochester Institute of Technology, Dr. Ajami has been a faculty member at some of the leading universities in the United States. He has held appointments abroad, too — Distinguished Professor at the American University of Beirut, the University of Istanbul, Grand Ecole of Management (HEC) in France, and Prague University of Economics in the Czech Republic.

He is a prolific researcher. He is the author of a widely used textbook, *International Business: Theory and Applications*. His articles on international business have been published in the leading journals in his field. His productivity as a researcher has not diminished since he joined the UNCG faculty a little more than a



Dr. Ajami (I) with graduate assistant Ms. Christina Calabria (r)

year ago. He is co-author of the forthcoming book, Global Entrepreneurship.

When Dr. Ajami speaks on international

When Dr. Ajami speaks on international business, it is with the voice of authority. His expertise is widely recognized. He has been interviewed on Nightline with Ted Koppel, the Lehrer NewsHour, NBC News, CNN, and National Public Radio.

His vision for the Center for Global Education and Research is based on a fact that students and the business community in the Triad and across North Carolina must recognize. "Global and domestic economies are inseparable — from high tech to low tech, computer chip to potato chip. We live in a seamless, global economy. It does not recognize national boundaries. It undermines them.

"This global economy," he said, "is not just a playing field for the big, multinational conglomerates. Medium and small-sized firms can find a niche, too. Telecommunications is the leveler. It doesn't recognize distance. It allows everybody to participate."

He described the Center as an umbrella organization. "In addition to our outreach programs with the business community, we are an instructional unit within the Bryan School at UNCG. As such, we foster development of proficiencies in international business and research.

"We have inventoried our curriculum. We want to be certain we have the kinds of courses that are consistent with our goal of global business education. All our MBA students are now required to take a newly created course, 'Managing in a Global Economy.' We plan to introduce soon a course in international accounting and finance."

Dr. Ajami also has made available through the Center an international experience for students. Each semester up to twenty MBA and undergraduate students spend a week in Berlin.

"It's the ideal city in which to observe socio-economic changes within our global vil-

## THREE GRADUATE ASSISTANTS HELP DR. AJAMI WITH RESEARCH IN THE CENTER

Christina Calabria, who graduated from UNCG with a degree in communications and public relations, is currently enrolled in the MBA program at the Bryan School. She's interested in international business and speaks Spanish fluently.

**Dimiter Gerensky** is a native of Bulgaria who worked with Dr. Ajami at the Rochester Institute of Technology. He moved to Greensboro to continue working with Dr. Ajami and is now an MBA student in the Bryan School. He speaks several Eastern European languages.

Rachel Strulson of Greensboro graduated this past December with an MBA from the Bryan School after spending a year abroad studying in Australia. She is now a member of the special projects team in the worldwide procurement department at IBM.

lage," Dr. Ajami said. "Berlin is a world-class city where East meets West. It is the capital of the largest economy in Europe, home to the new European central bank, and home base of some of the largest international corporations. German firms are also the largest foreign investors in North Carolina."

During the most recent trip, students visited a BMW motorcycle factory and participated in a seminar on the fast approaching European monetary union. They attended presentations on the German economy, the German labor market, German politics, and culture. They toured museums, attended cultural events. They took a day trip to the Polish Academy of Sciences located in about two hours east of Berlin. They attended there a lecture on German-Polish relations and enjoyed Polish cuisine.

"We hope to make the Berlin experience available to all our MBA students," Dr. Ajami said.

"This experience, coupled with our other programs, will give the Center and the Bryan School a distinct competitive advantage; a truly global dimension to business education. And that is something the larger business schools around the country talk about, but have yet to do. UNCG is taking the lead by providing a distinctive international business program now."

### WORKING WOMEN USED POPULAR CULTURE

#### TO STAND UP FOR THEIR RIGHTS IN THE 1900S



Dr. Nan Enstad History Department

In the big cities of the Northeast and Midwest, working women at the turn of the century made a statement. However, their voices, and the story of how they found them, have been lost to us until now. Dr. Nan Enstad of the UNCG History Department has been rescuing them through her research.

She recounted this incident to explain her interest. The year was 1909. In New York City, twenty thousand young women walked off their jobs in the garment industry. A reporter for the old Colliers magazine dropped by for a look and was baffled at the

"I had come to observe the Crisis of a Social Condition; but apparently this was a social occasion. Lingerie waists were elaborate, puffs towered; there were picture turbans and di'mont pendants."

This, a garment workers' strike? Another strike observer cautioned the reporter not to be hasty in dismissing the walkout as frivolous. "Just because they're laughing, ain't no sign they don't mean busi-

How to explain the anomaly of young Jewish and Italian immigrant women turned out in the fashions of the day walking a picket line? It looked weird. Something was going on here, and it looked and sounded culturally significant. The New York strike of 1909 wasn't an isolated incident. Similar strikes by young working women happened across the industrialized Northeast and Midwest in this period.

These women, Dr. Enstad said, were defining for themselves what they called "ladyhood." The definition held political overtones in an informal sense — it provided solidarity. For them, fashion and festivity were compatible with activism and strikes.

But what about those picture turbans and di'mont pendants?

Working women, Dr. Enstad said, used

consumer culture to enact their definition of "ladyhood." They dressed in the latest high fashion. They appropriated and enhanced upper class styles in how they talked and walked.

"Their 'ladyhood' also drew upon popular fiction and films which granted working heroines 'lady' status with secret inheritances and marriage to millionaires," Dr. Enstad said. "Working women's version of 'ladyhood' differed greatly from middle class ideals. It defended, rather than decried, physically demanding wage labor for women."

For working women at this time, consumer culture became a resource, albeit an imperfect one, in creating identities for themselves as wage earners in a culture which considered wage labor a male pursuit, degrading to femininity.

These women, unlike middle-class women, did not draw on an expanded domestic ideology of "civic housekeeping" to justify their political activism, Dr. Enstad said. Their justification was embedded in how they defined "ladyhood."

"For example," Dr. Enstad said, "they demanded an end to sexual harassment by insisting that they be 'treated like ladies.' Furthermore, these women expanded the notion of female heroism as portrayed in the dime novels they read and the movies they attended. They enlarged the heroism to include actions such as walking picket lines and delivering public speeches."

Labor leaders, however, discouraged the activities of working women. They tried to eliminate the interest in fashion and popular culture rather than incorporating it into rhetoric to bolster union activities and membership.

"As a result," Dr. Enstad said, "this important early incorporation of consumer culture into Americans' daily lives and consciousness became buried in the historical record."

### 40,000 Girls to Join Great Strike of New York Waistmakers



Dr. Enstad has been diligent the past few years in digging out the fragments from the historical record and piecing them together into a story. Her study stands at an interdisciplinary juncture. It's where women's history, labor history, and popular culture studies meet.

Her study adds new sources and perspectives to an ongoing goal in women's history to understand the changing lives and consciousness of women who left few written records. Her research has included the cheap fiction, serial films, and ready-made fashions of the period.

To conduct it, she has traveled to the Kerlan Collection of Popular Literature at the University of Minnesota, the Motion Picture Division at the Library of Congress, the Center for Motion Picture Study at UCLA, the New York Library Theater Collection, the Museum of Modern Art, and the Tamiment Labor History Archives. Through interlibrary loan, she has researched newspapers, memoirs, oral histories, and labor union journals.

Her research also redressed existing scholarship on working women at the turn of the century. "These studies," she said, "give the erroneous impression that there were two very different groups of working class women: serious women who went on strike, and fun-loving women who sent to the movies. My project reveals that the women

who so eagerly embraced consumer culture were the same women who shocked the nation with large, female-dominated strikes in the 1910s."

On a larger scale, Dr. Enstad's research contributed to the growing inquiry by scholars into the impact of popular culture on American society. "Historians have long noted the revolutionary importance of the transition to a consumer-based society in American life but have found it difficult to measure the effects of consumer culture on individual or group consciousness," she said.

"It is one thing to analyze surviving popular fiction and film scripts, and quite another to address the question of how people experienced the fiction and film they consumed. What did these products mean to those who purchased them? How did consumer culture affect the way they saw the world? Specifically, did consumer culture make people more, or less, likely to become involved in organized political activity such as labor activism?

Dr. Enstad's study addressed these questions by integrating social history methods with recent advances in cultural theory. Based on her research, she is currently writing a book, Ladies of Labor, Girls of Adventure: Working Women and Popular Culture, 1880-1920.

"WOMEN WHO SO EAGERLY **EMBRACED CONSUMER CULTURE WERE** THE SAME WOMEN WHO SHOCKED THE **NATION WITH** LARGE, FEMALE-**DOMINATED** STRIKES IN THE 1910s"

### AWARD LISTINGS

FISCAL YEAR 1997

### Sampling of Awards in Education

& Department	Sponsor	Amount	Project Title
Treana Adkins-Bowling Teachers Academy	Ecolab Foundation	\$5,000	Reading Together USA
Leandra Bedini Leisure Studies	US Department of Education	\$103,330	Preparation of Minority Personnel in Therapeutic Recreation
Roy Forbes Southeastern Regional Vision for Education (SERVE)	US Department of Education	\$6,880,917	Regional Educational Laboratory
Claudia Green Food, Nutrition & Food Service Management	NC Department of Public Instruction	\$18,000	Certification of Child Nutrition Staff and Evaluation of Food Safety and Sanitation Curriculum
Harol Hoffman & Gerald Meisner Instructional Technologies Education Center	NC Department of Public Instruction	\$45,224	Technology Tools for Improving Instruction
Timothy Johnston Arts & Sciences	National Science Foundation (subcontract from NC A&T State Universi	\$117,733 ty)	NC Alliance for Minority Participation
Garrett Lange & Carolyn Boyles Human Development & Family Studies	US Department of Education	\$252,991	Mastery Behaviors & Scholastic Competence of At-Risk Children Transitioning into School and Shared Perceptions of Parents & Teachers
Barbara Levin Gerald Ponder Curriculum & Instruction Jean Camp School of Education	Microsoft Corporation	\$25,000	Microsoft Professional Development & Partnership
Sandra Maree-Ouellette <i>Nursing</i>	PHS/Bureau of Health Professions	\$44,240	Nurse Anesthetist Traineeships
Catherine Matthews Curriculum & Instruction	US Geological Survey	\$29,000	Wetlands and Water Quality: Hands-on Hydrology in North Carolina
Judith Niemeyer Curriculum & Instruction Deborah Cassidy & Linda Hestenes Human Development & Family Studies	US Department of Education	\$106,779	Interdisciplinary Studies in Preschool Education and Development
Rita O'Sullivan Educational Research Methodology	Forsyth Early Childhood Partnership	\$40,000	Year 2 Evaluation of Forsyth Early Childhood Partnership

Principal Investigator & Department	Sponsor	Amount	Project Title
Denise Tucker Communication Susan Larson Corporate & Foundation Relations	Kate B. Reynolds CharitableTrust	\$126,826	Learning to Hear
Pamela Werstlein Nursing	Southern Council on Collegiate Education for Nursing	\$30,000	WK Kellogg Foundation FNP Faculty Fellow
Sampling of Awards in the Arts	& Humanities		
Matthew Barr Broadcast, Cinema & Theatre	South Carolina Arts Commission	\$1,000	Carnival Train
George Dimock Art	University of Arizona Center for Creative Photo	\$2,500 ography	Staging Photographic Modernism: Edward Weston's Photographs 1918-1930
Stuart Dischell English	National Endowment for the Arts	\$15,000	Creative Writer's Fellowship in Poetry
Douglas Dreishpoon Weatherspoon Art Gallery	National Endowment for the Arts	\$6,000	Conservation Treatment: Matisse Prints
Nan Enstad History	American Council of Learned Societies	\$20,000	Ladies of Labor, Girls of Adventure: Working Women and Popular Culture, 1880-1920
Michael Frierson Broadcast, Cinema & Theatre	Center for Creative Leadership	\$1,500	Lee Robinson: Lawyer/Artist
Pamela Hill Weatherspoon Art Gallery	NC Arts Council	\$1,189	Arts in Education Project: Art Smart
William Link <i>History</i>	Virginia Historical Society	\$750	Slavery, Sectionalism, and the Politics of Power: Virginia, 1851-1861
Loren Schweninger History	Charles Stewart Mott Foundation	\$57,000	Race, Slavery, and Free Blacks: Petitions to Southern Legislatures & County Courts: 1776-1867
Mark Smith-Soto Romance Languages	NC Arts Council	\$1,000	Publication of International Poetry Review
Susan Stinson & Jill Green <i>Dance</i>	Community Foundation of Greater Greensboro	\$3,464	Dance Connections
Sampling of Awards in the Socia	l and Behavioral Scienc	ces	
Daniel Bibeau Public Health Education	United Guaranty Corporation	\$11,775	Planning and Evaluation of United Guaranty Corporation's Wellness Program
Susan Calkins Psychology	NIH/National Institute of Mental Healt	\$126,200 h	Developmental Precursors of Preschool Aggression
Richard Ehrhardt Information Systems & Operations Management	National Science Foundation	\$84,505	Finished Goods Management Models for Just-in-Time Production
Anne Fletcher Human Development & Family Studies	William T. Grant Foundation	\$108,653	Social Network Closure and Child Well-Being
Nancy Gladwell, James Sellers & Heather Gibson <i>Leisure Studies</i>	Greensboro Area Convention Convention & Visitors Bureau	\$22,923	Perceived Satisfaction Levels of and Meeting Planners and Participants Utilizing the Greater Greensboro Area

10 • MINERVA: Research at UNCG

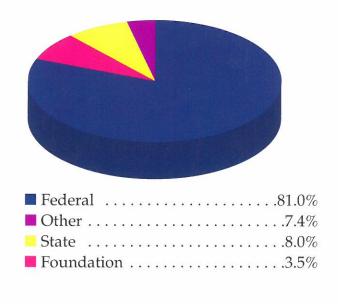
Principal Investigator & Department	Sponsor	Amount	Project Title
Daniel Gould Exercise & Sport Science	US Olympic Committee	\$39,051	Assessing Positive and Negative Factors Influencing US Olympic Athletes and Coaches
lennifer Kerpelman Human Development & Family Studies	National Science Foundation	\$17,997	Examining Identity Processes Within Close Relationship Contexts
Albert Link Economics	National Science Foundation	\$34,238	Development of an Industrial Database on Licensing Patterns
Carol Mackinnon-Lewis Center for the Study of Social Issues Susan Keane Psychology	NC Department of Human Resources, Division of Mental Health	\$382,975	Guilford Initiative for Treatment Services
Thomas Martinek Exercise & Sport Science	Greensboro Jaycees	\$5,000	Project Effort: Enhancing Resiliency in Under-Served Youth
ohn Rife Social Work	Lutheran Family Services	\$18,750	Americorps Access Applied Evaluation Research
Christopher Ruhm Economics	Executive Office of the President	\$75,000	IPA: Senior Economist at the Council of Economic Advisors
Martha Taylor Food, Nutrition & Food Service Management	Wood Communications Group	\$31,243	Fighting Hunger in North Food, Carolina: Perceptions versus Reality
Robert Wineburg Social Work	Lilly Endowment	\$128,295	Religion, Politics, and Social Services: A Book
Sampling of Awards in Science	& Mathematics		
Richard Fabiano Mathematical Sciences	National Science Foundation	\$19,000	Stability and Approximation for Distributed Parameter Systems
Maureen Grasso Textile Products Design & Marketing	Cotton, Inc.	\$7,000	Spectrophotometer Measurement of Woven and Knitted Textile Samples
Alice Haddy Chemistry	National Science Foundation	\$150,000	Biophysical and Electron Paramagnetic Resonance Studies
Vincent Henrich Biology	NC Biotechnology Center	\$6,424	A DNA Typing Workshop for Attorneys a Legal Professionals
Esther Leise Biology	National Science Foundation	\$122,764	Nitric Oxide Inhibition of Molluscan Metamorphosis
Promod Pratap Physics & Astronomy	NIH/National Institute \$170,688 of General Medical Sciences		Kinetic Analysis of the Na+, K+-ATPase Reaction Mechanism
Parke Rublee Biology	North Carolina Sea Grant	\$40,024	Distribution and Genetic Variability of Pfiesteria Piscimorte in the Coastal Zone
Robert Stavn Biology	Office of Naval Research	\$119,647	Ocean Optical Modeling: Complex Optical Field Structure & Dynamics of Coastal Case 2 Waters
Neal Stewart Biology	National Science Foundation	\$110,000	Green Fluorescent Protein as a Whole Plant Marker: A Powerful Ecophysiological Tool
lie Wang Mathematical Sciences	National Science Foundation	\$27,221	Structural Aspects of Average-Case NP-completeness

12 • MINERVA: Research at UNCG

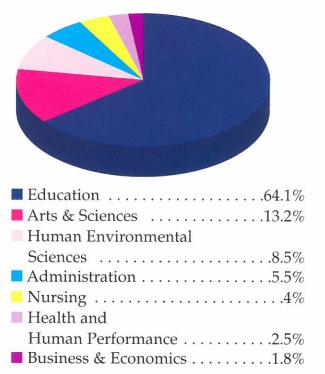
### AWARDS & EXPENDITURES

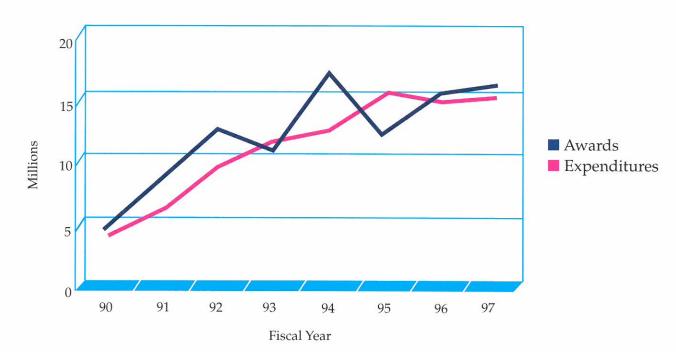
FISCAL YEAR 1997

### By Source (fiscal year 1997)



### By Academic Unit (fiscal year 1997)





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