



April 29, 2002

MEMORANDUM

**DUKE
UNIVERSITY**

To: Members of the Duke University Board of Trustees

From: Nannerl O. Keohane

Subject: Summary of Activities

I am pleased to provide this report of activities since the February meeting and in anticipation of the culmination of the academic year. As always, the agenda for Commencement weekend is quite full. We are pleased that author/journalist and honorary degree recipient Tom Wolfe will be sharing his insights with our graduates and their families as our 2002 Commencement speaker. As you may know, Tom's daughter Alexandra is among those who will be graduating. I also look forward to presenting Trustee Emeritus and former Williams College President John Wesley Chandler, sociologist Shmuel N. Eisenstadt, civic leader Eleanor Thomas Elliott, and U.S. Congressman and legendary civil rights leader John R. Lewis with honorary degrees.

Spring Reunion

While spring is the time to send more of our newly minted graduates out to the world "after Duke," it's also a time when we welcome back to the campus graduates of earlier classes. Last month, we had one of our most successful alumni reunion weekends ever, with a record 3,500 alumni and guests attending. I visited with many of our alumni, and was gratified by how eager they were to talk about what Duke has meant, and continues to mean, to them. We were blessed by splendid weather and, thanks to the good work of **Joe Jackson** and our grounds crew, the campus was in full splendor. One highlight came Saturday night, when more than 2,000 people danced under the big tent to the music of Maurice Williams and the Zodiacs. As always, alumni director **Laney Funderburk** and his staff deserve our thanks for planning and implementing a terrific weekend of activities.

Admissions

As we bid adieu to one class of Duke students, we prepare to welcome another. You will recall that in December we accepted 506 students for early decision. In early April, Duke mailed letters to more than 3,000 outstanding high school seniors from every state and dozens of nations inviting them to join the Class of 2006. The university hopes to have 1,616 first-year students enroll this fall. We won't know until later this month who specifically will be enrolling, of course, but as Director of Undergraduate Admissions **Christoph Guttentag** has reported, we know this is a record-setting group in many ways. We received a record number of applications (15,860) - well ahead of last year's 14,711 applications and 740 ahead of our previous record of 15,120 in 1987. One of the downsides of our record success this year is that we are turning away students who only a few years ago would have been admitted. But as we are successful in recruiting some of the fine applicants we now attract, we know others understandably are disappointed.

We realized significant increases in a number of the diverse groups we targeted, including foreign students and minority students. We have record numbers of applicants from African-Americans (1,536), Asians/Asian-Americans (2,848), Latinos (910), and Native Americans (115) candidates respectively. We also had a record number of applicants to the Pratt School of Engineering (2,432), reflecting, we believe, the increasing recognition of the excitement that the Pratt School is experiencing under Dean Kristina Johnson's leadership.

We are convinced that one reason for the record number of foreign applicants - 1,200 - is this is the first time we are offering need based financial aid to international students. That, and the focused efforts of Guttentag and his staff to recruit top students, are clearly paying dividends.

Changes at Fuqua

Perhaps none of our schools has been as aggressive in developing its international focus as the Fuqua School of Business. As you will know from recent reports, Dean **Doug Breeden** and his faculty are recalibrating Fuqua's global strategies to take advantage of opportunities for alliances with major universities in China and Korea, and at the same time reducing the school's direct physical presence in Germany. In March, Fuqua signed agreements to begin partnerships with Seoul National University and Peking University. These are, arguably, the top universities in Korea and China, two of the world's most dynamic economies. At first, these relationships will exchange small numbers of students and will facilitate joint faculty research and exchanges. Longer term, we hope these relationships will blossom in other ways and be of larger benefit to all of us.

As for the Fuqua School of Business Europe (FSBE) offices in Frankfurt, we will continue to teach Duke MBAs and executives in Frankfurt and elsewhere in Europe, but we intend to bring home our dean for FSBE, **Robert Ashton**, and to reduce our full-time staff in Frankfurt. This shift in global strategy will place greater emphasis on our global executive MBA education and alliances with other leading universities across the globe, and less emphasis on a permanent physical presence abroad. Fuqua's Board of Visitors and Provost **Peter Lange** join Dean Breeden in believing that the changes Fuqua is making will give Fuqua greater flexibility and more reasonable costs in providing Duke MBA programs to a global market.

Awards and Honors

Spring is the time when many prestigious national scholarships and fellowships are awarded. Earlier this year, I reported that Duke had a record four students receive a Rhodes Scholarship. I am pleased to report that two Duke juniors have been selected as recipients of a prestigious Truman Scholarship, which recognizes academic accomplishments, leadership potential, and commitment to a career in public service. **Dave Chokshi**, an A.B. Duke Scholar from Baton Rouge, Louisiana, and **Troy Clair** of New York City, were among 80 winners nationwide who will receive scholarships of \$3,000 for senior year study and up to \$27,000 for graduate studies. Chokshi is interested in health and biomedical science policy, and plans to enter a joint graduate degree program leading to an M.D. and a master's degree in public health. Among the challenges he intends to address in the future are biomedical issues that bridge ethics, science, and health, as well as health issues that affect disadvantaged populations in rural and international communities. Clair, who is Duke Student Government's newly elected vice president for student affairs as well as president of the Black Student Alliance, intends to prepare for a public service career by completing a joint graduate program that combines a law degree with a master's in public policy. He then plans to work as a legislative aide or policy adviser in the federal government and to run for political office.

Four Duke students, including Dave Chokshi, have won Barry M. Goldwater Scholarships, which recognize undergraduate students who conduct impressive research work in science, mathematics, and engineering. Other recipients are **Rebecca Ahrens** of St. Louis, Missouri; **David Arthur** of Princeton, New Jersey; and **Andrew Taube** of McLean, Virginia, all of whom are A.B. Duke Scholars. The scholarships provide up to \$7,500 a year toward tuition and other college expenses. **Mary Nijhout**, associate dean of Duke's Trinity College of Arts and Sciences, says Duke is one of very few institutions that offered four nominees and received four scholarships. She notes that the continuing success of our students in the Goldwater competition "speaks to the quality of our students and to the commitment of our faculty in guiding their research."

Duke junior **Cara Elizabeth Weber** of Sarasota, Florida, is one of 20 students in the nation to be awarded a

Beinecke Scholarship. Each scholarship provides \$32,000 for graduate study in the arts, humanities, and social sciences. When she graduates from Duke, Weber plans to enter a Ph.D. program concentrating in comparative literature and English, in preparation for a career of university teaching and writing. In preparing for that future, Weber spent the spring semester studying in Paris.

Several members of the faculty have also received major honors since our last meeting.

The National Science Foundation announced this week that it is giving the Alan T. Waterman Award, its highest honor for a young researcher, to Duke neurobiologist **Erich Jarvis**. Jarvis, a performing artist-turned scientist, studies the brain system of vocal learning birds. His work has led to a greater fundamental understanding of how the brain structures of birds have evolved to produce learned vocalizations - insights that will also aid understanding of how humans learn speech. He is investigating, with NSF support, why so few birds and other animals have vocal learning capabilities. He is also researching, with support from the National Institutes of Health, the basal ganglia pathway loop in songbirds' learned vocal communication. Diseases of the basal ganglia in humans include Parkinson's, depression, chronic anxiety, and some speech pathologies. In announcing Jarvis' selection, NSF Director Rita Colwell said, "He is the epitome of the modern scientist, crossing between disciplines and ideas, and blending his enormous sense of creativity learned at a very young age and applying it to get the very most from scientific experimentation."

Hydrologist **Gabriel G. Katul** of the Nicholas School of the Environment and Earth Sciences has been awarded the American Geophysical Union's James B. Macelwane Medal, which recognizes significant contributions to the geophysical sciences by an outstanding young scientist. Katul, associate professor of hydrology and co director of the Center for Hydrologic Science, specializes in the transfers of water vapor and carbon dioxide between the biosphere and the atmosphere. He has established a national reputation as an organizer and participant in the AmeriFlux program, funded by the U.S. Department of Energy to measure the carbon uptake by large tracts of forest. Working at the FACE (Free Air CO₂ Enrichment) site in Duke Forest, Katul has estimated forest carbon uptake under ambient levels of carbon dioxide.

Not to be outdone by these recognitions of our outstanding junior faculty, several senior faculty members have received similarly impressive honors. Three Duke historians - **John Hope Franklin**, **Gerda Lerner**, and **Anne Firor Scott** - are the only scholars to receive the Organization of American Historians' prestigious Distinguished Service Award. The award recognizes their efforts to create and shape two of the major sub fields of American history, African-American history, and women's history. Professors Scott, Franklin, and Lerner not only advanced the study of history during the second half of the 20th century, but have touched the lives, intellectual development and work of a generation of historians, and have truly changed the ways we understand both the past and our present. Scott, the W.K. Boyd Professor of History Emerita, is known for her work in Southern women's history. Franklin, James B. Duke Professor of History Emeritus, has devoted his life to the study, research, and documentation of African-American history. Lerner, a visiting professor of history at Duke, has written 10 books on the female experience in this country, and is credited with establishing the country's first graduate program in Women's History at Sarah Lawrence College in 1972.

Ariel Dorfman, Walter Hines Page Research Professor of Literature and Latin American Studies at Duke, has been named the 2002 winner of the ALOA prize, perhaps the most prestigious Danish literary award. The ALOA prize, given annually by the Centre for Literature from Africa, Asia, Latin America, and Oceania, recognizes the Danish translation of Dorfman's memoir *Heading South, Looking North: A Bilingual Journey* as best book (fiction or nonfiction) from these continents published in 2001. The memoir already has been published in 10 other languages.

A series of radio programs created by Dr. **Jeremy Sugarman**, director of the Center for the Study of Medical Ethics and Humanities at the Medical Center, has been honored with a Silver Reel award from the National

Federation of Community Broadcasters and a Gracie Allen Award from the Foundation of American Women in Radio and Television. The series was cited for its "superior quality and stellar portrayal of the changing roles and concerns of women." The series, hosted by Linda Belans and produced by WUNC's Beverley Abel, examined such topics as, "Can truth in medicine ever be harmful?" "What are the ethical issues behind genetic testing?" and "Who should make the medical decisions for those who can't do so themselves?" The series was supported by a grant from the Greenwall Foundation, and produced at the studios of the Duke News Service.

Finally, **William H. Schlesinger**, dean of the Nicholas School of the Environment and Earth Sciences, has been elected president of the Ecological Society of America (ESA). Founded in 1915, the ESA is the country's primary professional organization of ecologists, representing more than 7,600 scientists in the United States and around the world. As president, Schlesinger will be a primary spokesperson for the society and will interact with other societies, government officials, and the public on behalf of the ESA. Schlesinger is an expert on global warming, particularly the role of soils in the global carbon cycle and on desert ecosystems.

While several members of our faculty have received these external recognitions, it is also important to note a number of significant internal recognitions. Six members of the faculty have been appointed to endowed chairs through the university's Bass Program for Excellence in Undergraduate Education. As the Trustees will know, the Bass Chairs recognize members of the faculty who are both gifted teachers as well as superb scholars. The Bass Program for Excellence in Undergraduate Education was established as part of a \$40 million initiative with a \$10 million challenge gift from Anne and Bob Bass. Under the challenge component, donors may endow a professorship with a gift of \$1.125 million, with the Bases contributing the remaining \$375,000 required to qualify for a named chair.

The newly appointed Bass Fellows are **Daniel J. Gauthier**, Anne T. and Robert M. Bass Associate Professor of Physics; **Michael Hardt**, Jack H. Neely Associate Professor of Literature; **Scott Lindroth**, Kevin D. Gorter Associate Professor of Music; **Thomas Nechyba**, Fuchsberg-Levine Family Associate Professor of Economics; **H. Frederik Nijhout**, Bishop-MacDermott Family Professor of Biology; and **David J. Brady**, Brian F. Addy Professor of Electrical and Computer Engineering. Each of these Bass Fellows exemplifies what we hope all of our faculty will aspire to.

I am delighted to report that nine new endowed professorships were created through gifts as part of the Bass Challenge. We are especially grateful that three of these new professorships have been established by Trustee Emerita Susan B. King and Trustees J. J. Kiser and his family, and Chairman Spike Yoh and his family.

Dean of the Faculty of Arts and Sciences **Bill Chafe** reports that four members of the Arts and Sciences faculty have been selected for top awards in teaching excellence. Professor **Owen Astrachan**, of the Department of Computer Science, received The Richard K. Lublin Distinguished Teaching Award; Associate Professor **Alex Motten**, of the Department of Biology, received The David and Janet Vaughn Brooks Distinguished Teaching Award; Professor **Victor Strandberg**, of the Department of English, received The Robert B. Cox Distinguished Teaching Award; and **Allen Kelley**, Professor of Economics, received The Howard D. Johnson Distinguished Teaching Award.

Graduate School

Just as there is good news on the undergraduate admissions front, Graduate School Dean **Lew Siegel** reports that we have some very positive news about our incoming group of graduate fellows. This fall, the Graduate School expects to matriculate the largest number of James B. Duke Fellows in our history - 48 outstanding young scholars have accepted to date, up from 35 last year and 21 the year before. The yield on J.B. Duke Fellowship offers was, for the first time in our history, equal to that for the overall Ph.D. population (40 percent), reflecting the increasing strength and attractiveness of our graduate programs for the very best doctoral

students. All told, 18 of the 34 students have accepted our offers of Duke Endowment fellowships. We have one additional Duke Endowment Fellow who will defer the award in order to pursue a master's in philosophy at Cambridge University in England before coming to Duke for doctoral study.

The Graduate School also will matriculate seven new University Scholars. This is the highest honor Duke can offer to a prospective Ph.D. candidate. University Scholars are the very top rank of the J. B. Duke Fellows, as determined by an interdisciplinary committee of faculty. What's particularly exciting is that four of these new University Scholars are African-American and simultaneously hold the University Scholar, J.B. Duke, and Duke Endowment awards. I am very proud of the job that the Graduate School, under the leadership of Dean Siegel and Associate Dean **Jackie Looney**, is doing to attract outstanding graduate and professional students to Duke.

The Executive Committee of the Graduate Faculty has voted formally to recommend new Ph.D. programs in Bioinformatics and Genome Technology, and in Molecular Genetics and Microbiology. It also approved a new interdisciplinary admitting program in Integrated Toxicology, and a new interdisciplinary certificate program in Cognitive Neurosciences. Each of these fields is at the cutting edge of interdisciplinary science and reflects the success of our efforts to reinforce new intellectual approaches to some of the most exciting areas of inquiry.

Three graduate students - **Christina Chia**, of Los Angeles, California, Ph.D. candidate in English; **Wilda Gafney**, of District Heights, Maryland, Ph.D. candidate in religion; and **Charles McKinney**, of Durham, Ph.D. candidate in history - were recognized by the Samuel DuBois Cook Society for their service to the Duke-Durham community at a splendid event attended by more than 350 people from Duke and Durham. Trustee Emeritus Cook regaled all of us that evening with stirring memories of his years with Martin Luther King, Jr., a classmate at Morehouse College. Two other students - **Tonya Martin**, of Roebuck, South Carolina, Ph.D. candidate in pharmacology; and **Tomalei Vess**, of Durham, Ph.D. candidate in biology - will be honored this month with the William J. Griffith University Service Award, given to graduating Duke students whose service to Duke and Durham have made a significant impact on university life. Vess, whom the Trustees will know from her service as president of GPSC, was recently elected as a Young Trustee.

Major Appointments

We should also recognize the superb quality of new leaders we are attracting to key administrative leadership positions. Dr. **William J. Fulkerson Jr.**, who has served as chief medical officer for Duke University Hospital and the Private Diagnostic Clinic, has been named chief executive officer of Duke Hospital. Fulkerson, one of our most respected physicians, succeeds **Mike Israel**, who is leaving Duke to take the chief operating officer position of the 18 hospital North Shore Long Island Jewish Health System in New York. Chancellor **Ralph Snyderman**, president and CEO of the Duke University Health System, says that Fulkerson's experience as one of the nation's leading pulmonary specialists and as a leader of Duke Hospital will help ensure a smooth transition from Mike's strong leadership over the past nine years. Fulkerson, by the way, has been preparing himself for this leadership responsibility for some time. He not only is current on the latest developments in his medical specialty, but he is scheduled to receive his MBA from Fuqua during Commencement Weekend, dramatically illustrating the degree to which business and financial acumen have become indispensable to leadership in health care delivery in today's environment.

We are very excited that **Christopher B. Newgard**, a professor in the departments of pharmacology and cancer biology, and internal medicine, has been named as the new director of the Sarah W. Stedman Nutrition Center. Prior to his appointment at Duke, Newgard was a professor of biochemistry and internal medicine at the University of Texas Southwestern Medical Center in Dallas. He was the recipient of the 2001 Outstanding Scientific Achievement Award, given annually by the American Diabetes Association.

We also are equally excited about the appointment of **Brigid Hogan**, a world leader in developmental biology and stem cell research, as chair of Duke's department of cell biology. Hogan's seminal work with mice led to the discovery of new ways of generating pluripotent stem cells, embryonic stem cells taken during the first four to five days of the embryo's existence. Pluripotent stem cells have the widest application because they can develop into almost all known types of cells. Hogan is a Howard Hughes Medical Institute investigator, and served as the scientific co chair of the 1994 National Institutes of Health report on human embryo research. Hogan comes to us from Vanderbilt where she was director of the Stem Cell and Organogenesis Program; she is also the first woman to be appointed chair of a basic science department in the history of the Medical School.

In another stellar appointment, **April Brown**, professor of electrical and computer engineering and executive assistant to the president at Georgia Tech, will become chair of the Department of Electrical and Computer Engineering at the Pratt School of Engineering. Brown's expertise lies in the fabrication of electronic and optoelectronic materials and devices for high speed communication applications. Brown's current research emphasis is on new nanoscale materials (substances on the order of a billionth of a meter in size) and the integration of a range of technologies for future electronic microsystems. In another advance for diversity, Brown is the first woman to chair a department in engineering in Duke's history. We are excited not only by her research accomplishments and contributions, but by Brown's efforts to promote engineering and science among elementary and high school students and in fostering diversity in engineering.

MaryAnn Black, chair of the Durham Board of County Commissioners and a leading advocate for health and human services programs, has been named director of community affairs for the Duke University Health System. Working closely with Health System leaders and the university's director of community affairs, **Michael Palmer**, Black will have important responsibilities in helping to develop and implement strategies and programs that enhance the health system's relationships with local governments, community leaders, faith communities, and other groups which support the health and human service needs of the people of Durham. Black has served as chair of the county commissioners since 1996 and as a commissioner since 1990. She announced several months ago that she would not seek reelection next November.

Major University Speakers and Events

One of the great advantages that institutions of Duke's caliber offer our students is the opportunity to meet with scholars and leaders from a wide variety of fields who visit our campus. During Reunions Weekend, the Law School hosted Supreme Court Chief Justice William H. Rehnquist, who gave the inaugural lecture in a series of talks titled "Great Lives in the Law." The series will bring distinguished jurists, attorneys general, and other public officials to campus to offer insights about great figures in the law and to deepen our understanding of lawyers' role in society and to promote respect for law among law students, lawyers, and the public. C-Span broadcast Chief Justice Rehnquist's talk, which focused on a history of the court and his predecessors as Chief Justice.

I know that Law School Dean **Kate Bartlett** is pleased that two other members of the U.S. Supreme Court have committed to speak at Duke. Supreme Court Justice Sandra Day O'Connor has accepted an invitation to visit Duke as part of the "Great Lives in the Law" series in April 2003, and Justice Anthony Kennedy is expected to visit the Duke Law School this coming fall. If we can persuade two more Supreme Court Justices to visit Duke in the near future, we will have a quorum.

Many of the events on campus continue to focus on the aftereffects of the September 11 tragedy. The U.S. ambassador to Saudi Arabia, and the Washington bureau chief for perhaps the most innovative and influential Arab satellite television channel, held well-attended public lectures at the Terry Sanford Institute of Public Policy. Ambassador - and Duke alumnus - Robert W. Jordan addressed "U.S. Saudi Relations After September 11," while Hafez Al Mirazi, chief of Al Jazeera Television's Washington bureau, spoke about "The Arab

Media's Coverage of the War on Terrorism."

High ranking government officials, legal scholars and other academic experts gathered at Duke in April to examine post September 11 security issues. The two day conference included lectures by James L. Pavitt, the Central Intelligence Agency's deputy director of operations, and Nabil Fahmy, Egypt's ambassador to the United States.

Washington Post executive editor Leonard Downie and associate editor Robert Kaiser, also speaking at the Sanford Institute, called the news coverage of the September 11 terrorist attacks "the news media operating at its best." Unfortunately, they added, such coverage is not typical of American media who in recent years often cynically underestimate America's need for good journalism.

In other campus events, the John Hope Franklin Institute is gearing up to host a year-long seminar on "Race, Justice, and the Politics of Memory." This timely seminar, being co-convened by Professors **Srinivas Aravamudan** of English and **Charles Piot** of cultural anthropology, will look at redress and reparation issues from ancient Greece to postwar Japan and Germany to Holocaust survivors, South Africa, and descendants of slaves.

The Theater Department recently put on the first theatrical adaptation of Don DeLillo's *Mao II*. This terrific adaptation used a variety of new technologies to discuss major issues of the modern world, including terrorism. We were delighted that DeLillo made a rare public appearance to read at last month's Blackburn Literary Festival on campus.

Duke University's student symphony, under the direction of **Harry Davidson**, teamed with professional opera singers to present a full-length, concert version of "Don Giovanni." Tackling a complete opera is a first for the orchestra, but Davidson said he was confident in the abilities of his students, whose musicianship and enthusiasm elicited praise from area music critics.

Finally, a ballet that has not been performed in more than 50 years was reconstructed by the Duke University dance program and presented at Reynolds Theater. "The Planets" was created in 1934 by Antony Tudor, one of the foremost choreographers of the 20th century. To reconstruct the ballet, Duke's dance program applied for and received a \$10,000 grant last summer from the National College Choreography Initiative, which is supported by the National Endowment for the Arts. Duke's dance program, under the direction of **Barbara Dickinson**, worked diligently for several months to recreate the ballet.

The Campaign for Duke

The Campaign for Duke Steering Committee met on campus in March to review the status of the \$2 billion Campaign for Duke, now in its final 19 months. To date, we are ahead of schedule toward our goal with \$1.8 billion raised, a magnificent reflection of the generosity of a great many people. At the February board meeting, we announced the wonderful \$25 million gift of the Nicholas Family that created the Nicholas Faculty Leadership Initiative. You will be pleased to know that the Nicholas challenge has already brought a half dozen new professorships and about as many new endowed faculty support funds. We are confident that it will ultimately stimulate \$75 million in new endowment for Duke faculty.

Among major gifts announced since our last meeting are \$8 million from Herman and Ruth Albert to help create an eye research institute in their name. At the Duke Eye Center, new space is critically needed to house additional ophthalmology investigators and state of the art laboratories and equipment. Construction of the five story building adjacent to Duke University Hospital, which will house the Ruth and Herman Albert Eye Research Institute, is expected to begin in October and be completed in 2004. You may recall that the Alberts,

who have both been patients at Duke, gave \$3.5 million to Duke last year to support the Herman and Ruth Albert Lung Cancer Genomics Fund.

Alumnus **Lawrence D. Lenihan Jr.**, managing director of a technology and healthcare investment company, is giving \$1.25 million to the Pratt School of Engineering for a special laboratory where undergraduates can brainstorm, design, and develop innovative projects. To be named the Lawrence D. Lenihan Jr. Learning Center, the lab will be an important part of Pratt's expansion of teaching facilities and will allow us to enhance the individualized learning experience for engineering undergraduates. Lenihan, a 1987 graduate of Duke and a member of the Pratt School's Board of Visitors, also is supporting a scholarship program for under represented minorities from New York City.

The Pulmonary Hypertension Program at Duke University Medical Center has received an anonymous \$1 million gift to develop an international research database that promotes collaboration among clinical investigators around the world and helps identify key areas for pulmonary hypertension research. The database was pioneered by Dr. **Victor Tapson**, director of Duke's pulmonary hypertension program, which is one of only about 20 centers in the world involved with large clinical trials and clinical research involving pulmonary hypertension patients.

These gifts and literally thousands of others have brought us close to a campaign goal that once seemed unfathomable and few institutions have ever attempted. Thanks to the leadership of campaign co-chairs Pete and Ginny Nicholas, and the exceptional work of Senior Vice President **John Piva**, Vice President **Bob Shepard**, and the Development staff, the Campaign for Duke is helping change the face of our university, providing support for priorities identified in our strategic plan, *Building on Excellence*. As I told the Campaign Steering Committee, while the finish line will be a welcome sight, it can also be a dangerous one, because seeing the goal is not the same as reaching it. Like Aesop's famous hare, we still have to finish the race; with the continued leadership and support of the Trustees, I am confident we will do so successfully.

Duke and the Community

As always, we have good news to report on the community front. Once again, Duke brought more than 300 Durham public school students to campus with the goal of inspiring them to consider attending college. This year, we focused for the first time on middle school students, since research shows that this is the time youngsters make decisions that determine whether or not they will pursue higher education. We had a great group of students, whom teachers had identified as having college potential but not much encouragement at home. Duke students, faculty, and staff members accompanied the groups all over campus, from Cameron Indoor Stadium and the Chapel, to classrooms and laboratories. It is wonderful to see so many people from the campus devote their personal time to these young visitors and to encouraging them to expand their educational horizons. **Susan Kauffman** in our Office of Public Affairs, and the staff of the Office of Community Affairs, deserve special commendation for organizing this important event.

In an innovative approach to addressing the challenges created by the emergence of gangs in Durham, Duke's Office of Community Affairs, Durham Parks and Recreation, the Mary Duke Biddle Foundation, and Durham Herald-Sun Newspapers worked together to support Walltown Children's Theatre's production of "Bangin'," an original play with an anti-gang message. Joseph Henderson, cofounder of the Walltown Children's Theatre and a partner in the Duke-Durham Neighborhood Partnership, wrote and directed the play. A former teacher, Henderson was inspired by the death of a 15-year-old student who was killed by gang gunfire last year in Durham. The play, which was performed April 16, sold out three performances at the Carolina Theatre in downtown Durham and attracted a good spectrum of the community, including many young people. We are grateful to The Duke Endowment for funds they provided to the university to support our efforts to develop partnerships with Durham that can help reduce crime and gang activities in our partner neighborhoods.

I also wanted to note that our Facilities Management Department (FMD) has initiated a program this year that significantly benefits the Durham community through the Duke-Durham Neighborhood Partnership. Director **Jerry Black** and his staff and contractors play active roles in working with the Office of Community Affairs on projects identified as priorities by our partner residents and schools. This past December, for instance, FMD contractors donated more than \$35,000 in pro bono work and supplies to replace a broken drainage system at George Watts Elementary School. More than \$50,000 of pro bono landscaping is underway at the Lyon Park Community Center as they prepare for occupancy of this \$6.3 million facility in June. A number of other contractors have donated their services, valued at more than \$100,000, to help construct a series of ecological environments around which teachers at nearby E. K. Powe Elementary School are developing a science and environmental curriculum focusing on ecosystems. We greatly appreciate this support for the Neighborhood Partnership and FMD's commitment to continue these initiatives.

A weekend dance marathon at Duke in March raised \$25,000 for Caring House, a home for adult cancer patients receiving outpatient treatment at the Duke Comprehensive Cancer Center. More than 130 students paid a \$25 registration fee and secured sponsorships to take part in the eight hour event. The students, who were instructed by professional dancers on the finer points of ballroom, salsa, tango, tap, swing, vintage, and Irish dancing, not only had fun, but also supported a worthwhile cause.

Finally, on the community front, Senior Vice President for Public Affairs and Government Relations **John F. Burness** was honored by the Durham Public Education Network for his "exemplary community leadership in public education." Burness, who has served on the Public Education Network board and was the founding chair of the Communities in Schools dropout prevention program, received the Josephine Clement Award for his leadership of the successful \$74 million Durham County bond campaign last fall, of which \$51 million was for the public schools.

Medical Research News

At a time when we are all concerned about the financial challenges facing academic medicine, it is useful to step back and consider the extraordinary breakthroughs that Duke's medical researchers are making.

Researchers from Duke and the University of Texas Southwestern Medical Center in Dallas have found a biochemical pathway in muscle cells responsible for generating many of the beneficial effects of regular exercise. This study could lead to the discovery of new drugs that mimic the benefits received from aerobic exercise. Dean **Sandy Williams**, the senior author of the study, tells us that eventually this discovery could lead to improvements in the quality of life for people who suffer from chronic illness and could benefit from aerobic exercise, but who are unable to perform the amount of exercise necessary to produce the desired effects. Drugs that stimulate this pathway also could reproduce health benefits of exercise that help to prevent diabetes and cardiovascular disease. Among those who might benefit include patients with heart failure, pulmonary disease, renal failure, diabetes, and other chronic diseases.

The research was conducted at UT Southwestern where Williams was director of the Ryburn Center for Molecular Cardiology before becoming dean of the School of Medicine last year. A research team at Duke led by Williams is continuing to study the pathway described in this study to identify the best targets for drug discovery. They also seek to determine whether this pathway is pertinent to other tissues such as fat or even to the biology of cancer cells.

In a similar type of project, molecular biologists in the medical center's Mycology Research Unit have traced cellular pathways that are targeted to enhance the action of drugs used to treat fungal infections in people with compromised immune systems, such as those undergoing organ and bone marrow transplants. The discovery of how the immune suppressing drugs enhance the action of antifungal drugs could lead to the development of

new drugs designed to treat fungal infections such as systemic yeast infections and often deadly cryptococcal infections. The study was led by Dr. **Joseph Heitman**, a Howard Hughes Medical Institute investigator at Duke, and funded by grants from the National Institute of Allergy and Infectious Diseases.

In addition to searching for new drugs, Duke researchers are also busy testing the efficacy of existing ones. The largest clinical trial performed to date on the popular herbal supplement St. John's wort has found it to be no more effective than a placebo for the treatment of a moderately severe form of major depression. Duke researchers, led by Dr. **Jonathan R. T. Davidson**, director of the Anxiety and Traumatic Stress Program at Duke, said the findings suggest that depression of at least moderate severity should not be treated with St. John's wort and that patients, rather than self medicating themselves with an over the counter medication or supplement, should consult a healthcare provider to assess the best treatment for depression.

Duke University Medical Center, Duke Clinical Research Institute, and Research Triangle Institute performed the data analysis and coordinated the study, which appeared in the April 10 issue of the *Journal of the American Medical Association*. The study was funded by the National Center for Complementary and Alternative Medicine, the National Institute of Mental Health, and the Office of Dietary Supplements, all divisions within the National Institutes of Health.

The goal of moving potentially lifesaving drugs from the laboratory to the clinic rapidly in an effort to save brain tumor patients, is a priority of both the Duke Comprehensive Cancer Center and the nonprofit foundation Accelerate Brain Cancer Cure. The protocol of this collaboration invites researchers from any venue - academia, corporations, and government agencies - to submit compounds to Duke for immediate screening, free of charge. Such an offer is highly unusual in the drug research and development arena, where funding is extremely scarce for so called "translational" studies that advance drugs from the laboratory to the clinic. Dr. **Darell Bigner**, director pro tempore of the Duke Comprehensive Cancer Center, says the expectation is that pharmaceutical companies will be more likely to submit their approved and experimental anti cancer drugs (for breast, colon, lung cancer, etc.) to Duke for further testing for their potential utility against brain cancer because there will be no cost to the companies.

In other cancer news, new and promising ultrasound techniques devised at the Pratt School of Engineering can detect and in some cases characterize breast abnormalities that are deeper and smaller than the 1 centimeter sized lesions that physicians can detect by feel. The technology has many other potential clinical applications, such as detecting clogged arteries and deep vein blood clots, says **Katheryn Nightingale**, an assistant research professor of biomedical engineering. The work is supported by the Whitaker Foundation and the National Institutes of Health.

Two studies designed to measure the strength of the habit of smoking versus the craving for nicotine have shown that low nicotine cigarettes could possibly be used in smoking-cessation therapy. The two separate studies, led by **Jed E. Rose**, director of our Nicotine Research Program, focused on the use of two different cigarettes with extremely low levels of nicotine, and found that the amount of smoke a smoker inhales can satisfy the craving to smoke despite the absence of nicotine. Rose is perhaps best known for his role in developing the nicotine patch. The studies were supported by a grant from the National Institute on Drug Abuse and an unrestricted gift from Vector Tobacco Inc.

Advanced imaging technologies have enabled Duke researchers to produce 3 D "magnetic resonance microscopy" images of mice at more than 250,000 times greater resolution than MRI scans used to diagnose human disease. **G. Allan Johnson**, director of the Duke Center for In Vivo Microscopy, believes this "Visible Mouse" project will offer a powerful new tool in exploring genetically altered mice which, as you well know, have become the principal animal model for exploring a vast range of human disorders from cancer to drug addiction.

Medical center researchers have "reprogrammed" adult stem cells taken from a small deposit of fat behind the kneecap into functioning cartilage, bone, or fat cells that could potentially be grown into replacement tissues. The same research team reported last year that they were able to turn fat cells taken from liposuction procedures into functional cartilage cells, and this latest study provides further evidence that stem cells taken from different adult sources have the potential to be transformed into multiple specialized cell types. **M. Quinn Wickham**, a fourth year medical student working in the laboratory of **Farshid Guilak**, director of orthopedic research at Duke and senior member of the research team, said that a knee surgeon could easily obtain some of these fat cells using a minimally invasive approach and grow custom made cartilage for the individual to repair an injury in the knee with his or her own tissue.

By studying a chemical marker in the brain that reflects the health of brain tissue, Duke researchers have found new clues about why some people experience more rapid age related brain changes than others. The research involves the presence of the apolipoprotein gene known as apolipoprotein E4 (APOE4), which is carried by approximately 25 percent of the population and has been linked to increased risk of Alzheimer's disease, cardiovascular disease and memory loss after head injury or bypass surgery. Duke psychiatrist and lead researcher on the study, **P. Murali Doraiswamy**, said those elderly patients who carry the APOE4 gene experienced a more rapid loss of nerve cell functioning in the front lobe of their brains, and their brains showed signs of aging faster than those without the gene. This study was funded by the American Federation for Aging Research and through the Paul Beeson Physician Scholar Award.

Finally, in a similar study, medical center researchers have shown that the poorest of poor Americans are more than twice as likely to die of severe heart disease than similar patients with higher incomes. The research suggests that the main explanation comes from what happens in these patients' lives after hospital discharge. The researchers studied 2,207 patients enrolled in a multi center clinical trial in which they all received the same standardized treatments. The analysis revealed that patients with an annual household income of less than \$10,000 had a 30 day mortality rate 2.6 times higher than those more well off, and a six month mortality rate 2.1 times higher. Lead investigator Dr. **Sunil Rao** said that once out of the hospital, these patients may return to risky habits such as smoking or bad diet, or more probably, they cannot afford the medications prescribed for them to treat their heart disease. The study, funded by COR Therapeutics, San Francisco, California, and supported by The Duke Clinical Research Institute, raises important healthcare policy issues because most of the very poor tend to be elderly.

Athletics

We all were excited by the success of our women's basketball team, which completed the best record (31-4) in its history and made its second trip to the Final Four in the past four seasons. There was a sizeable Duke presence in San Antonio, including Trustee Emerita Dottie Simpson and Trustee Cookie Kohn. **Gail Goestenkers'** splendid team won its third consecutive ACC Tournament championship, and placed third in the final Associated Press poll and fourth in USA Today. Sophomore **Alana Beard** was a consensus first team All-America honoree and ACC Player of the Year.

The men's basketball squad also finished with a 31-4 record, won its fourth consecutive ACC Tournament championship, and was ranked first in the country in the regular season Associated Press poll for the fourth straight year (an NCAA first). **Jason Williams** was the unanimous National Player of the Year, while teammates **Mike Dunleavy** and **Carlos Boozer** each earned All-America honors. I am pleased to report that Coach **Mike Krzyzewski** is recovering well from his hip replacement surgery which was performed immediately after Duke's loss in the Sweet Sixteen to eventual NCAA finalist Indiana.

The women's golf team, currently ranked second nationally, won four tournaments in succession entering the 2002 ACC Championships. The men's lacrosse squad has been ranked among the top 20 throughout the entire

2002 season, and recently defeated the top-ranked team in the nation, Virginia, to win the ACC title before more than 4,000 fans in Koskinen Stadium. The fifth-ranked women's tennis team won its 14th ACC regular season title in the past 15 years in 2002. And the men's tennis team has been ranked among the nation's top 20 and secured the ACC regular season championship. Phillip King of the men's team has been named ACC Player of the Year.

Academic Integrity

I know that the Trustees will be pleased to learn about the efforts of a committee of faculty members, students, and administrators to raise the profile of academic integrity issues on campus. The committee's recommendations include establishing a new "Community Standard," which would take the place of the university's three different honor code documents and simplify and unify the university honor code and judicial processes. It would also eliminate the requirement that all exams be proctored; regularize the common practice of faculty members informally handling certain allegations of misconduct; and allow a wider range of sanctions for academic misconduct. The committee also recommends adding an obligation for students to report any incidents of misconduct they observe, although they may do so anonymously. Students now have no such obligation to report.

Academic Integrity Council chair **Judith Ruderman**, vice provost for academic and administrative services, said there is growing concern because national surveys show unacceptably high rates of cheating, plagiarism, and other misconduct. There is an emerging consensus that the time is right to revise the honor code and campus judicial practices, to raise awareness among both faculty members and students, and to create a stronger campus climate for academic honesty.

In Other Matters

Our undergraduate students have had some wonderful and meaningful learning experiences this semester. I'd like to tell you about just two of them.

Halfway through a course on modern Arabic literature and culture last fall, one of the students joked, "Let's go to Beirut." Professor **Miriam Cooke** responded: "If you write up a proposal, I'll make it happen." So several students wrote up proposals and, with Cooke's help, they went around campus and eventually raised more than \$18,000 from various sources. One student started a separate fund to buy books for Palestinian kids, including Harry Potter books in Arabic. In the end, seven students from that fall course traveled to Lebanon for nine days during spring break, visiting Palestinian refugee camps, meeting the prime minister and his sister, visiting Roman ruins, and learning about the ancient culture and modern conflicts in the Middle East.

The second noteworthy experience took place last month, when Duke undergraduates enrolled in a public policy seminar titled "The U.S. Role in International Security Affairs," visited Washington, D.C., to meet with senior government officials in the security and foreign policy arena. Professors **Richard Stubbing** and **Theodore Triebel**, each of whom has a security policy background, arranged the trip and accompanied the class. The trip began with a visit to the Pentagon, where the students met with several senior Department of Defense officials, including **Becky Schmidt**, MPP '83, an expert on defense budget issues on the Department of Defense Comptroller staff.

The next day, the students met at the State Department with the assistant secretary of state for arms control and officials working on policy dealing with nuclear and biological weapons and proliferation concerns. That afternoon, they visited the White House Conference Center to meet with key officials from the Office of Management and Budget (OMB) and the newly established Office of Homeland Security.

The Andrew W. Mellon Foundation is helping us offer students a different type of travel opportunity. Thanks to the Mellon Foundation and matching gifts, a \$1.6 million endowment has been created at Duke to support undergraduate teaching and research in Latin American and Caribbean studies. The endowment will fund undergraduate travel awards for research in Latin America and the Caribbean beginning this summer, and a new program to bring to the university visiting professors from throughout the region, which is expected to start in 2003. The travel grants are designed to complement class work with research experience for full time Duke undergraduates and are open to all fields and subjects. Five grants of up to \$2,500 will be awarded for use this summer.

Duke on TV

News from the university regularly appears on the pages of the national and international media and on the major television networks. I thought you'd be interested in two major television programs that have highlighted Duke faculty and students.

Duke has been regularly featured on prime-time TV this spring, and not solely because of the success of our basketball teams. A rare two-part "60 Minutes" broadcast about Duke's Brain Tumor Center and the inspiring work of its co-directors, Drs. **Henry Friedman** and **Allan Friedman**, prompted thousands of people to contact Duke in the days after the show aired. Many of the messages came from brain tumor patients and their families who were moved by the doctors' willingness to try any method - including the use of new drugs - to defeat the disease.

This past weekend, "Good Morning America" co-hosts Diane Sawyer and Charlie Gibson experienced college life again when they spent the night with Duke students in one of our West Campus dorms. As part of a show about the Triangle and higher education, Sawyer and Gibson spent an evening dining, talking and socializing with their hosts - juniors **Brady Beecham** of Lincoln, Nebraska; **Rachel Harold** of Winston-Salem; and **Eugene Kimm** of Columbia, South Carolina; and sophomores **Armando Estrada** of Dorado, Puerto Rico, and **Robert Tai** of Houston, Texas - before spending the night in Round Table. Because this took place just before finals when students were "chilling," we expect Diane and Charlie got a bit less sleep than normal!

As always, if you have any questions or want additional information about any items in this report, I hope you will let me know.