

Moving Higher and Higher:
Creating Building
Blocks for the Future



2008 STATE OF THE
SCHOOL ADDRESS



E. ALBERT REECE, MD, PhD, MBA

Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor
and Dean, University of Maryland School of Medicine



[Figure 1: Dean E. Albert Reece, MD, PhD, MBA]

2008 STATE OF THE SCHOOL ADDRESS

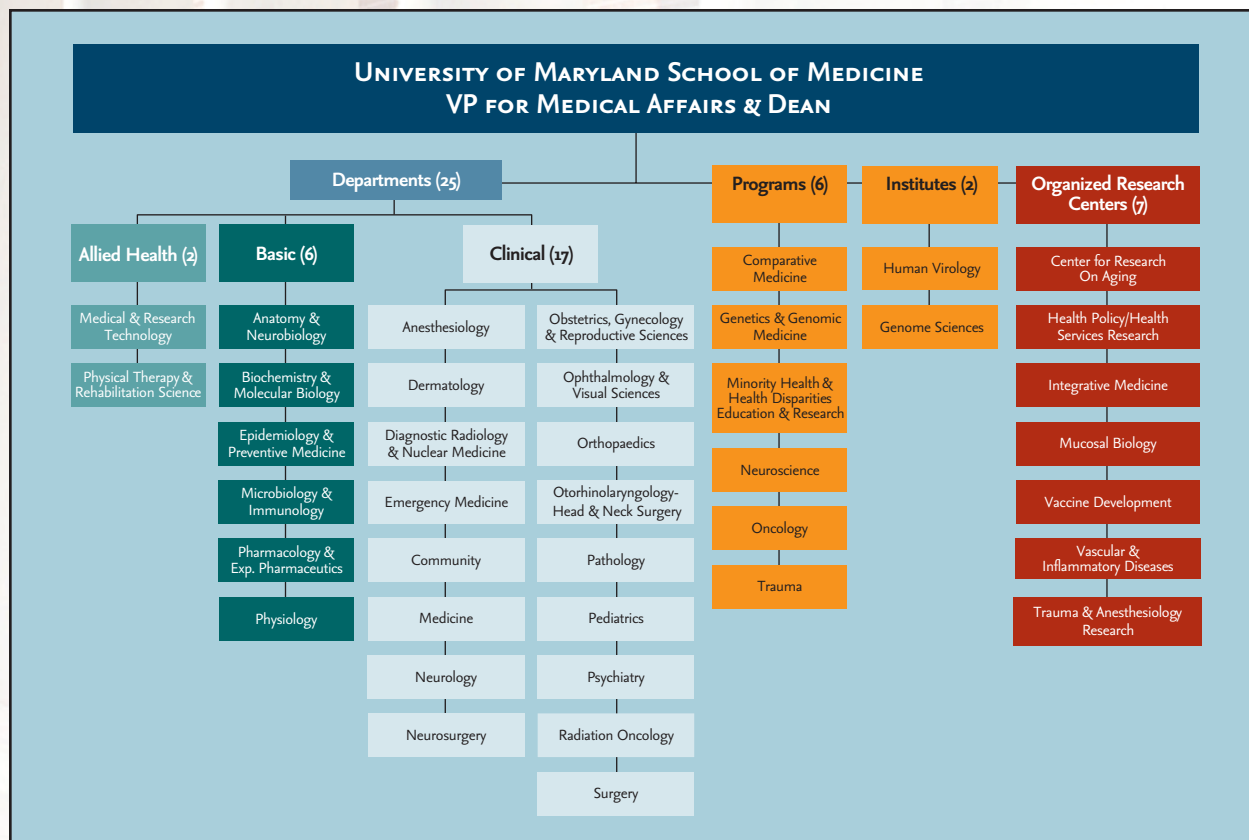
The theme of this year's address is "Moving Higher and Higher: Creating Building Blocks for the Future."

Building blocks are a collection of components designed to elevate and typically build a structure, and they are used here to represent various aspects of the School of Medicine's mission areas. As the building blocks of our mission areas are assembled, they are actually creating a tower of excellence – one that is being built by our faculty and staff every day.

As many of you know, the University of Maryland School of Medicine is an outstanding institution. However, I believe we can rise to an even greater level of excellence by constantly setting higher and higher goals for ourselves while at the same time doing everything possible to attain those goals. Each building block must be carefully and strategically assembled to effectively build our tower of excellence.

These building blocks are interdependent and when placed at the right place at the right time, they will build our tower even higher. We believe that this analogy can be aptly applied to the School of Medicine, where our efforts, our goals, our partnerships, our determination, and our relentless pursuit of excellence are indeed interdependent, and when harnessed properly, will propel this medical school to even greater heights.

During the past year, we had many significant accomplishments in the areas of clinical care, research, education and community outreach. Together, we provided expert healthcare to our community, the region and the world. Together, we have moved to the forefront of biomedical research and treatment by providing patients with the most advanced care available anywhere. Together, we are teaching the next generation of physicians, scientists and allied health professionals. Together we are playing a vital role in the life of this region, the state and the nation.



[Figure 2: School of Medicine organizational chart]

The medical school is configured into 25 departments: Two allied health, six basic science and 17 clinical. In addition, we have two institutes, six programs and seven organized research centers (Figure 2).

These departments, programs, centers and institutes are headed by School of Medicine department chairs or directors (Figure 3). In addition, other School of Medicine leaders include the assistant, associate, and vice deans who work with me in directing the activities of the School of Medicine.

WORK FORCE »

Our total work force is over 7,100 people (Figure 4). This past year, we increased our work force by about three percent, mostly trainees. The faculty distribution remained relatively constant, with the percent of female faculty between '07 and '08 remaining at about 34 percent and unrepresented minorities at about eight percent (Figure 5). Our faculty retention rate, which is more than 90 percent, is indeed remarkable.

EDUCATION »

One of the most exciting events of the past year was the successful reaccreditation of the medical school with virtually no negative citations. In fact, the Liaison Committee on Medical Education (LCME) gave us a full eight-year extension. This was the result of an extraordinary effort by 250 faculty, staff, and students working tirelessly over an 18-month period to prepare for the site visit.

The LCME site visitors were extremely complimentary about our programs and our institution. They were particularly impressed by our strong support of the curriculum, excellent resources and services, strong professional development programs and faculty mentoring efforts, a revised curriculum for years one and two, strong leadership of deans over the past decade, growth of our research enterprise and our outstanding commitment to teaching.



[Figure 3: University of Maryland School of Medicine leadership]

TOTAL WORKFORCE		
	2007	2008
Full-Time Faculty	1,243	1,209
Part-Time Faculty	230	249
Adjunct Faculty	1,238	1,227
Clinical Fellows*	139	183
Research Fellows	281	269
Residents*	535	560
Staff	2,344	2,494
University Physicians, Inc. Staff	972	981
Total	6,982	7,172

*UMMC pays salaries

[Figure 4: SOM workforce statistics]

FACULTY STATISTICS		
	FY 2007	FY 2008
Total Full-Time Faculty	1,243	1,209
Women	426 (34.3%)	420 (34.7%)
Underrepresented Minorities	92 (8.4%)	105 (8.0%)

>90% Retention rate of full-time faculty

[Figure 5: SOM full-time faculty statistics]

STUDENT BODY »

Our student body includes approximately 1,300 students: medical, graduate and allied health (Figure 6). Minority medical and graduate school students make up about 15 percent of the student body.

Medical school applications in the United States are leveling off at about 42,000 applicants per year. We saw a two percent increase in medical student applications here at the University of Maryland School of Medicine, which is a slight increase over last year and contrasts with the flat number observed nationally.

Of the almost 4,600 applications we received this past year, we accepted 160 students from 71 colleges and universities. Their ages ranged from 21 to 37; approximately 13 percent were underrepresented minorities and 57 percent were female. The average grade point average was 3.7, and the average MCAT score was 31, which are significantly above the national average (Figure 7). We also saw an increase in graduate school applications as well as an increase in the admission test (GRE) scores. We are experiencing both an increase in student applications and a significant improvement in the quality of students.

We have placed an increased emphasis on grant writing skills for our students and fellows. To accomplish this, we've created programs to teach students and post doctoral fellows the "art" of successful grant writing. As a consequence, this year we had an unprecedented number of new grant applications that were submitted to the NIH by students and post doctoral fellows.

We are also emphasizing joint degree programs to reflect the plurality of interests of our medical and graduate students. An increasing number of medical and graduate students have shown an interest in such diverse areas as law, business, policy and administration, and we want to be able to accommodate those interests. In addition to an MD or PhD degree, our joint degree programs allow students to also pursue simultaneously other degrees, such as a Masters in Public Health (MPH), a Masters of Science (MS), a Masters in Public Policy (MPP), or an MS or PhD in bioengineering. Soon, we will be offering other joint degrees, such as an MBA or a JD degree (Figure 8).

FALL STUDENT ENROLLMENT*

Medical, Graduate and Allied Health

	2007	2008
Medical	602	616
MD/PhD	34	34
Graduate	292	303
Genetic Counseling	11	11
Medical & Research Tech	87	87
Physical Therapy	204	201
Public Health	17	18
Total	1,247	1,270

*UMB Institutional Research and Planning Office

[Figure 6: SOM student body statistics]

2008 FIRST-YEAR MEDICAL STUDENT STATISTICS

- 4,584 applications for class of 160 students
- From 71 colleges and universities
- Ages range from 21 to 37 years
- 13% are underrepresented in medicine
- 57% are female, 43% are male
- Overall average GPA is 3.69
- Average MCAT score is 31

Above the National Average

[Figure 7: First-year medical student statistics]

NEW JOINT DEGREES

MD/MS — MD/MPH — MD/MBA — MD/JD, ETC.

Approved	Pending Approval	Under Discussion
Public Health – 2007 (PhD/MPH) (MD/MPH)	Public Policy – 2008 (MPP)	Business Administration (MBA)
Bioengineering - 2008 (MS/PhD BioE)		Health Services Administration (HSA) (MS/PhD)

[Figure 8: New SOM joint degree programs]

HIGHLIGHTING AN EXEMPLARY MEDICAL STUDENT

Jonas Nelson (**Figure 9**), a third year medical student, has demonstrated a profound passion for research. In 2006, he was selected for one of the highly competitive summer research fellowships offered from the Dean's Office.

He also is one of only 60 students in the United States to be selected this year for the extremely prestigious Doris Duke Clinical Research Fellowship, which provides support for a full year of clinical research training at one of the 12 approved sites throughout the country. Jonas has shown an extraordinary amount of promise at this very early stage in his career.



[Figure 9: Medical student Jonas Nelson]



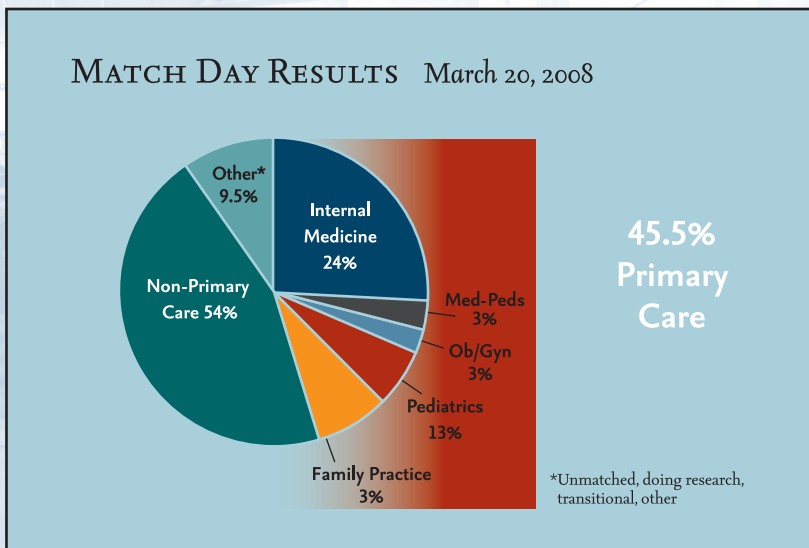
[Figure 11: Carolyn J. Pass, MD & Richard M. Susell, MD]

MATCH DAY AND GRADUATION AWARD CEREMONIES

There are two particularly exciting days in the life of a medical student: Match Day and Graduation. Match Day is the day that determines where the students will spend the next three to seven years of their lives. Approximately 45 percent of our students chose primary care fields; another 45 percent went into non-primary care or surgical subspecialty fields (**Figure 10**).

Prior to graduation, we hold an annual scholarship and awards ceremony. At this past year's ceremony, we had approximately 300 medical students, family members, donors, chairs and directors in attendance. At that time, we distributed nearly \$1 million in scholarship support and 37 academic achievement awards to students.

In addition, we received a very generous gift from two of our alumni: Drs. Carolyn Pass and Richard Susell (**Figure 11**), a married couple from the class of '66, who made a significant contribution toward the establishment of an Academy of Educational Excellence. This past year, we inducted five honorees into the Pass and Sussel Academy of Educational Excellence (**Figure 12**).



[Figure 10: Match Day results]



[Figure 12: Inaugural members of the Pass and Susell Academy of Excellence: (left to right) Michael Donnenberg, MD; Miriam Blitzer, PhD; Jordan Warnick, PhD; Larry Anderson, PhD and Frank Calia, MD]

GRADUATION

This year, we graduated 230 students: 146 medical students and 84 graduate and allied health students (Figure 13). The medical school convocation was held at the Meyerhoff Symphony Hall. The 146 medical graduates (Figure 14) were joined by a large group of faculty members on the stage and more than 1,500 family and friends in the audience. The keynote speaker for the medical school convocation was Dr. Francis Collins, the lead scientist in the completion of the Human Genome Project at NIH and the former director of the National Human Genome Research Institute.

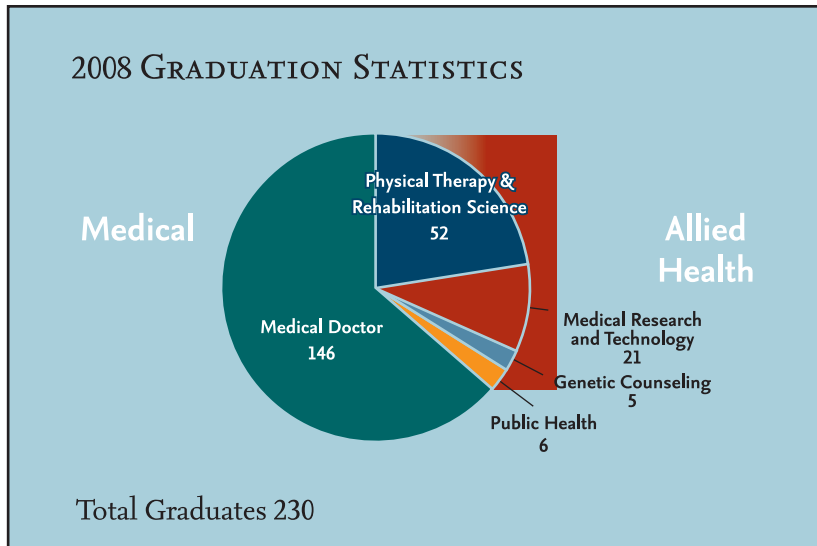
During the medical student convocation, we conferred three Dean's Distinguished Awards: Mr. Michael Cryor (Figure 15), the president of the Cryor Group and also the vice chair of the School of Medicine's Board of Visitors, received the Dean's Distinguished Gold Medal for Public Service; Dr. Francis Collins (Figure 16), received the Dean's Distinguished Gold Medal for Biomedical Research; and Dr. Paul Schenker, our oldest living School of Medicine alumnus at 105 years of age, was given the Lifetime Achievement Award (Figure 17).

ALUMNI REUNION

Another important event each year is our alumni reunion. We have more than 7,500 living alumni. This past year, more than 800 alumni returned to campus for special reunion events. Larry Pitrof, executive director of our Medical Alumni Association, coordinates the reunion. One of the biggest highlights of the reunion is a Clinical Pathological Conference (CPC), which is organized by Dr. Philip Mackowiak, a professor of medicine. Each CPC uses modern medicine to try to understand and post-humously diagnose illnesses a historical figure may have had.

This year's CPC featured the medical case of an Egyptian pharaoh who apparently suffered from two medical abnormalities: familial gynecomastia and cranial synostosis (Figure 18).

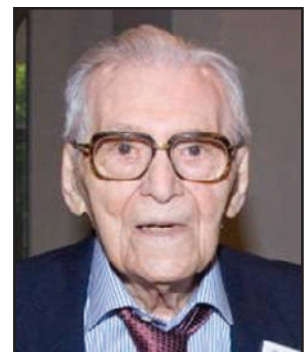
[Figure 18: The subject of this year's CPC was an Egyptian pharaoh]



[Figure 13: 2008 graduation statistics]



[Figure 14: Class of 2008]



[Figures 15, 16 & 17: Michael Cryor, MA, President, Francis Collins, MD, PhD, Paul Schenker, MD, Class of 1926]

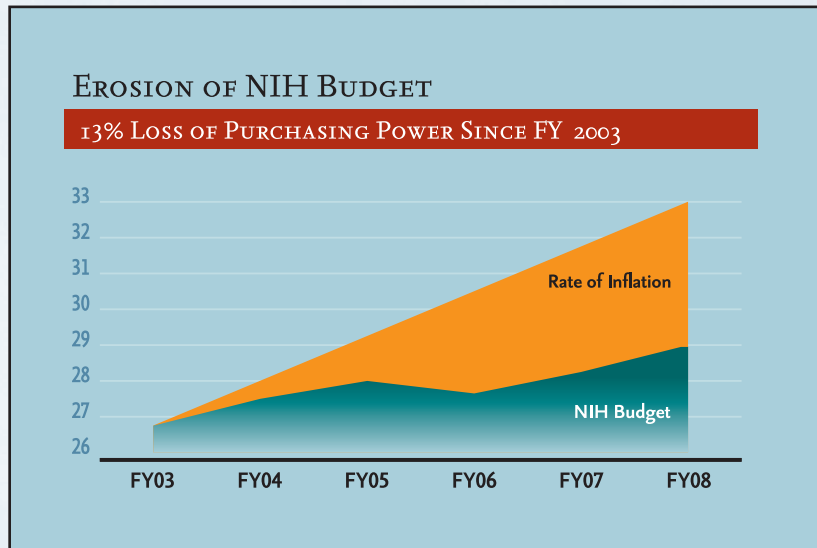
RESEARCH »

Biomedical research in the United States is funded primarily by a Congressional allocation of funds to the National Institutes of Health (NIH). These funds are then competitively secured by universities. In 2003, the NIH received approximately \$26 billion in Congressional allocations. Based solely on expected growth in inflation, NIH's allocation should have risen to more than \$32 billion by this year (Figure 19). In reality, the NIH budget has not kept pace even with inflation, and the consequence has been an approximately 13 percent loss of purchasing power by the NIH since 2003.

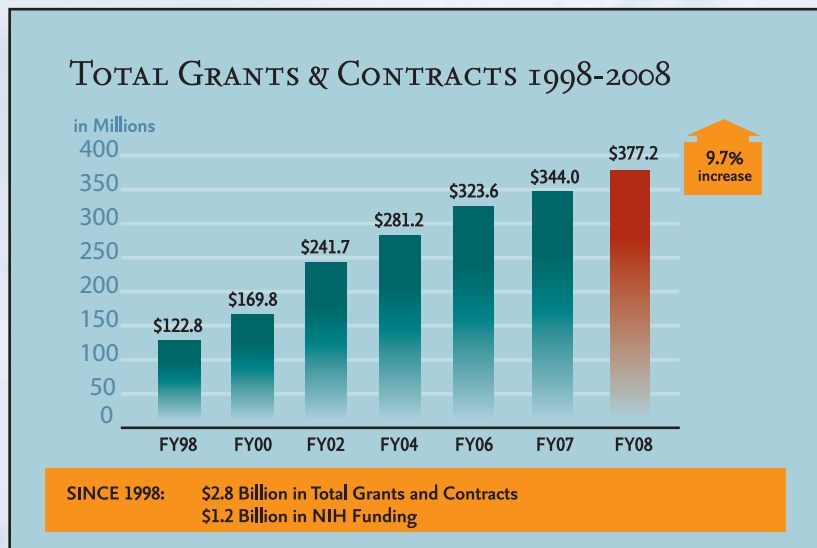
Essentially all of the major gains we enjoyed prior to 2003 have been lost, and we are challenged to excel with less. In addition, prior to 2003, there was a doubling of the NIH funds. Thus, many more researchers entered the NIH-funded pipeline, and we therefore have more people competing for less funds.

Last year we had a 6.3 percent increase in federal research funding despite the difficult times. This year, we had an unprecedented increase of almost 10 percent in federal research funding despite the challenges we face (Figure 20). This is a tribute to the enormous efforts, skill and excellence of our faculty.

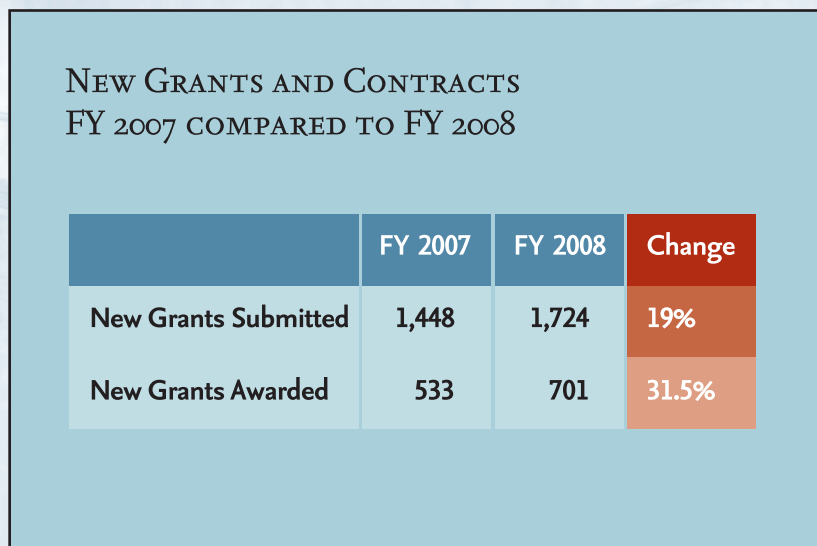
We analyzed the potential reasons for our success in securing NIH funding in these difficult times, and found that our faculty submitted almost 20 percent more grant applications; the rate of funded grant applications rose more than 30 percent (Figure 21).



[Figure 19: Erosion of NIH budget]



[Figure 20: Total grants and contracts 1998-2008]



[Figure 21: New grants and contracts FY 2007 compared to FY 2008]

TOP AWARDEES IN 2008

The top-10 NIH grant awardees ranged from almost \$4 million to nearly \$24 million; their research ranged from vaccine development to biowarfare prevention to research on an artificial heart/lung system (Figures 22 - 30). These awards represent the wide spectrum of interests and research strengths in the School of Medicine.

Many of our faculty also received funding from non-NIH sources. The top grants and awards from such non-NIH agencies and foundations ranged from \$3 million to about \$38 million (Figures 31 - 35), and included studies on HIV/AIDS and composite tissue transplantation.



Figure 22: Karen Kotloff, MD, professor of pediatrics, received a \$23.7 million grant from the National Institute for Allergy and Infectious Diseases.



Figure 26: Thomas MacVittie, PhD, professor of radiation oncology, received a \$6.3 million grant from the National Institute for Allergy and Infectious Diseases.

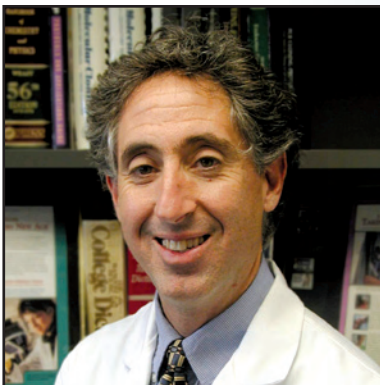


Figure 23: Alan Shuldiner, MD, professor of medicine, and director, Program in Genetics & Genomic Medicine, received two grants: a \$13.3 million grant from the National Center for Research Resources and a \$7.4 million grant from the National Institute for Diabetes and Digestive and Kidney Diseases.



Figure 27: Andrew Goldberg, MD, professor of medicine, and co-director, Center for Research on Aging, received a \$6 million grant from the National Institute on Aging.

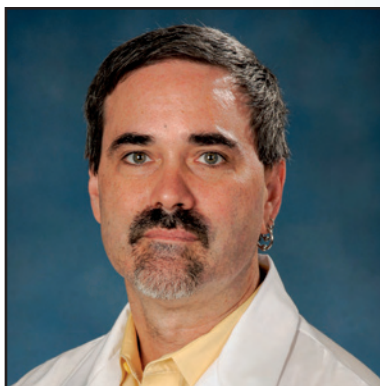


Figure 24: Owen White, MD, professor of epidemiology & preventive medicine, received a \$10 million grant from the National Human Genome Research Institute.

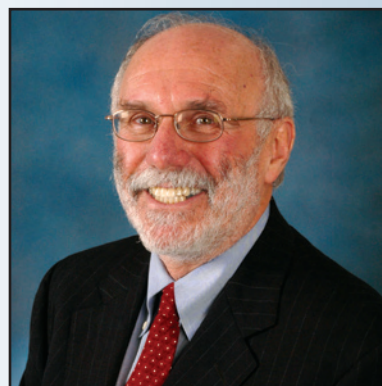


Figure 25: Myron Levine, MD, professor of medicine, and director, Center for Vaccine Development, received an \$8.2 million grant from the National Institute for Allergy and Infectious Diseases.



Figure 28: Susan Fried, PhD, professor of medicine, received a \$5.3 million grant from the National Institute for Diabetes and Digestive and Kidney Diseases.



Figure 31: Robert Redfield, MD, professor of medicine, received a \$38.2 million grant from the President's Emergency Plan for AIDS Relief.



Figure 34: James Nataro, MD, PhD, professor of pediatrics, received a \$5.6 million grant from the Bill and Melinda Gates Foundation.



Figure 29: Edson Albuquerque, MD, PhD, professor & chair of pharmacology & experimental therapeutics, received a \$3.7 million grant from the National Institute of Neurological Disorders and Stroke.



Figure 32: William Blattner, MD, professor of medicine, received a \$26 million grant from the President's Emergency Plan for AIDS Relief.



Figure 35: Stephen Bartlett, MD, professor & chair of surgery, received \$3 million grant from Congress.

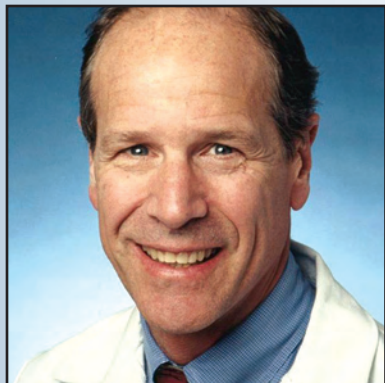


Figure 30: Bartley Griffith, MD, professor of surgery, received a \$3.6 million grant from the National Heart, Lung and Blood Institute.



Figure 33: Robert Gallo, MD, professor of medicine, and director, Institute of Human Virology, received a \$15 million grant from the Bill and Melinda Gates Foundation.

[Figure 37: SOM cancer research faculty]



OTHER RESEARCH HIGHLIGHTS

We recently celebrated the designation of the University of Maryland Marlene and Stuart Greenebaum Cancer Center, which is led by Dr. Kevin Cullen (Figure 36), as a National Cancer Institute (NCI)-designated cancer center. There are hundreds of cancer centers nationwide, however, only 64 centers have this prestigious NCI designation, which recognizes excellence in research and research-based patient care. Our cancer research faculty members (Figure 37) deserve enormous praise for this achievement.

In addition, this past year, Dr. Christopher Plowe, professor of medicine, (Figure 38) was chosen as a Howard Hughes Medical Institute-funded researcher. This prestigious grant was awarded to him based on his groundbreaking work in developing a malaria vaccine. Drs. Kirsten Lyke, assistant professor of medicine, (Figure 39) and Miriam Laufer, assistant professor of pediatrics, (Figure 40) received awards from the Doris Duke Foundation for their important work, which also is focused on alleviating the burden of malaria on people living in the developing world. Dr. Brian Berman, professor of family medicine, and director of the Center for Integrated Medicine, received a \$6.5 million grant to extend his work in traditional Chinese medicine (Figure 41).

At last year's State of the School Address, I announced that we had launched the new University of Maryland Institute for Genome Sciences (UMIGS). Since then, Dr. Claire Fraser-Liggett, professor of medicine and (Figure 42) director of UMIGS, significantly expanded the size of the Institute's workforce from just a few staff members to 72 people. She and her team have established three research programs — one in microbial genomics, one in bioinformatics and one in comparative genomics. Their research funding includes \$16 million annually in existing NIH funding and an additional \$127 million in NIH grant proposals under review. These are extraordinary accomplishments.



[Figure 36: Kevin J. Cullen, MD]



[Figure 40: Miriam Laufer, MD]



[Figure 38: Christopher Plowe, MD, PhD]



[Figure 41: Brian Berman, MD]



[Figure 39: 2007 Kirsten Lyke, MD]



[Figure 42: Claire Fraser-Liggett, PhD]

MEDICAL SCHOOL RANKING »

The Association of American Medical Colleges (AAMC) ranks medical schools nationally based on their total number of grants and contracts each year. Of the 76 public medical schools nationwide, we're in the top 10 percent at number seven (Figure 43). Of the 129 public and private medical schools, we're in the top 15 percent, at number 19 (Figure 44).

Increasingly the lack of laboratory space is threatening prospects for our continued growth and success. The proposed new Health Science Facility would give us an additional 500,000 square feet of space at an approximate cost of just over \$400 million (Figure 45). An outside consultant estimated that the construction phase alone would generate more than \$700 million in economic activity. Once the building is occupied, it will generate almost \$240 million of economic activity annually for our state and region.

AAMC MEDICAL SCHOOL PROFILE SYSTEM 2007

7th Out of All 76 Public Medical Schools (top 10%)

Rank	School	Research	Rank	School	Research
1.	UCSF	\$619,527,094	6.	Michigan	\$249,227,874
2.	U Washington	\$592,924,340	7.	Maryland	\$249,669,840
3.	UCLA-Geffen	\$469,412,600	8.	Alabama	\$247,404,022
4.	Colorado	\$327,569,949	9.	North Carolina	\$227,998,723
5.	UCSD	\$287,590,351	10.	UT Southwestern	\$219,919,053

GOAL: TOP 5% IN 5 YEARS

[Figure 43: SOM ranking among public medical schools]

AAMC MEDICAL SCHOOL PROFILE SYSTEM 2007

19th Out of All 129 Public and Private Medical Schools (top 15%)

Rank	School	Grants & Contracts	Rank	School	Grants & Contracts
1.	Harvard	\$1,458,375,652	11.	Washington St. Louis	\$360,025,744
2.	UCSF	\$619,527,094	12.	Yale	\$335,049,932
3.	U Washington	\$592,924,340	13.	Colorado	\$327,563,949
4.	Duke	\$506,342,439	14.	Stanford	\$308,707,108
5.	UCLA-Geffen	\$469,412,600	15.	Case Western	\$299,641,134
6.	Columbia	\$454,175,687	16.	UCSD	\$287,590,351
7.	Johns Hopkins	\$447,285,795	15.	Baylor	\$279,325,986
8.	Pennsylvania	\$439,158,179	18.	Michigan	\$256,227,874
9.	Pittsburgh	\$380,704,991	19.	Maryland	\$249,669,840
10.	Mount Sinai	\$374,532,071	20.	Alabama	\$247,404,022

GOAL: TOP 10% IN 5 YEARS

[Figure 44: SOM ranking among all 129 public and private medical schools in the US]



[Figure 45: Architect's rendering of Health Sciences Facility III]

FINANCE & PHILANTHROPY »

The medical school's revenue is close to three-quarter billion dollars. We have an economic impact in the state of more than \$1.5 billion. For every dollar that we receive from the state, we're generating approximately \$24 in economic activity in the state.

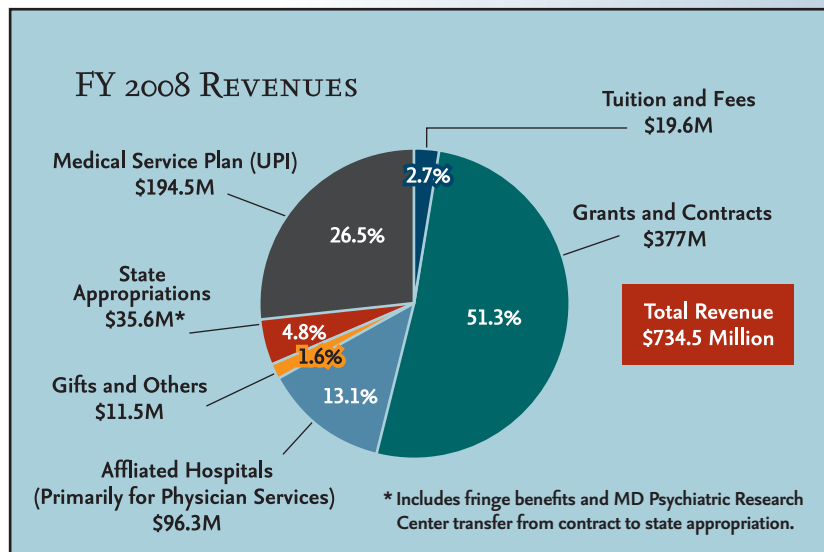
Slightly more than half, 51 percent, of our total budget consists of grants and contracts, most of which comes from the federal government, which we secure competitively (Figure 46). Less than three percent - about \$20 million - of our revenue comes from tuition; another 26 percent - \$194 million - comes from our Medical Service Plan; and 13 percent - or \$96 million - comes from various contracts, such as physician services contracts with the University of Maryland Medical Center, the Veterans Administration or with other hospitals. We receive less than five percent of our revenues from the state of Maryland.

We experienced about a nine percent increase in total revenue in 2008 versus 2007. The two main drivers of this increase are the 10 percent increase in grants and contracts along with a 11 percent increase in growth of our Medical Service Plan (Figure 47).

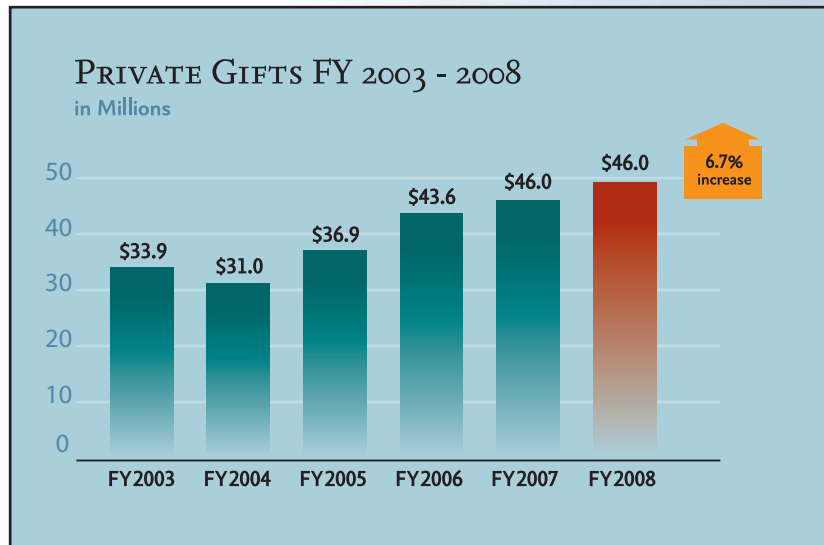
The average state funding per medical student among the nation's public medical schools is approximately \$92,000 per medical student. We received about \$60,000 per medical student from the state of Maryland in 2007. Therefore, we have placed a major emphasis on philanthropy to help close this funding gap from the state. Our private gifts for fiscal year 2007 were \$46 million, a 5.5 percent increase. This year, we had a strong almost seven percent increase in private gifts (Figure 48).

	2007	2008	% CHANGE
Grants and Contracts	343.8	377	↑ 9.6%
Tuition and Fees	19.0	19.6	↑ 3.1%
Medical Service Plan (UPI)	175.7	194.5	↑ 10.7%
State Appropriations	35.0	35.6	↑ 1.4%
Gifts and Other (Expended)	11.4	11.5	↑ 0.1%
Affiliated Hospitals	91.4	96.3	↑ 5.2%
Total	676.3	734.5	↑ 8.6%

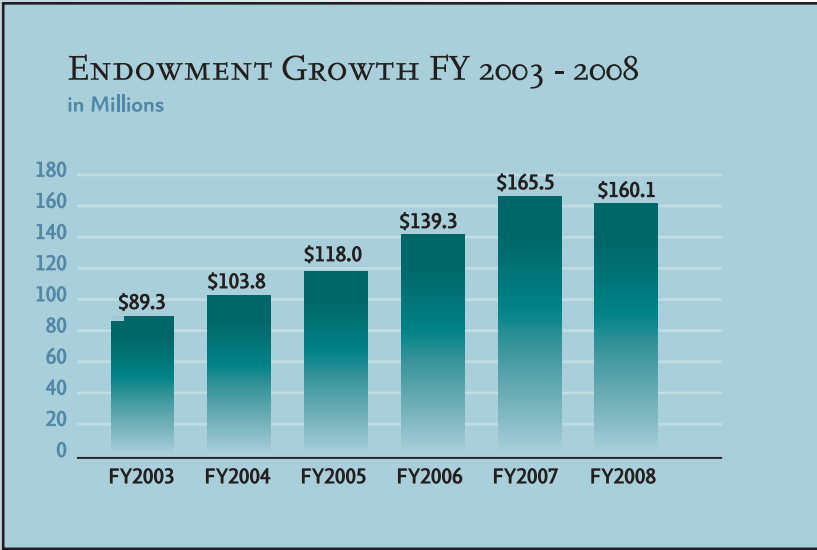
[Figure 46: SOM FY 2008 revenues]



[Figure 47: SOM FY 2007 and 2008 revenues]



[Figure 48: Private gifts by year FY 2003 - 2008]



[Figure 49: Endowment growth FY 2003 - 2008]

Our total endowment for this year is approximately \$160 million dollars (Figure 49). However, due to the tough economic times that we are experiencing, our endowment did not grow as much as it did in previous years. I am hopeful that its growth rate will rebound as the economy turns around.

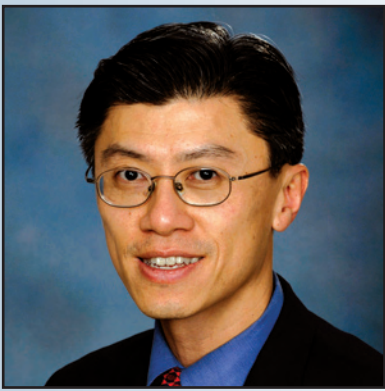
I want to thank most sincerely our donors who made significant contributions last year (Figure 50). Their donations were used to establish endowed chairs, distinguished professorships or medical faculty awards. We are extremely appreciative of their support throughout the years.

Recently, we introduced a special investiture ceremony to acknowledge our donors and the scholarship of our faculty. This past year, we had investiture ceremonies for three faculty: Dr. Toby Chai, professor of surgery, who became the inaugural John D. Young, Jr. Endowed Professor of Urology (Figure 51); Dr. Stephen Reich, professor of neurology, who became the inaugural Claire Zamoiski Segal and Thomas Segal Endowed Professor in Parkinson's Disease (Figure 52); and Dr. Mohan Suntha, professor of radiation oncology, who became the inaugural Marlene and Stuart Greenebaum Professor of Radiation Oncology (Figure 53).

FY 2008 TOP PHILANTHROPIC GIFTS

Donor	Amount	Recipient
Peter G. Angelos, Esq.	\$3,000,000	Surgery
Norton A. Foxman	\$2,500,000	Radiation Oncology
Thomas E. & Alice Marie Hales	\$2,500,000	Surgery
Lillian Crenshaw Blackmon	\$2,000,000	OB-GYN & Pediatrics
Clair Zamoiski Segal & Thomas H. Segal	\$2,000,000	Neurology
Dr. Michael Brin & Mrs. Eugenia Brin	\$1,500,000	Neurology
Howard S. Brown	\$1,500,000	Trauma
Carolyn J. Pass, M.D. '66 & Richard M. Susel, M.D. '66	\$1,200,000	Dean's Office
Orokawa Foundation	\$1,000,000	Cancer Center
Sydney Sacks, M.D. '46	\$1,000,000	Alumni Association

[Figure 50: FY 2008 top philanthropic gifts]



[Figure 51: Toby Chai, MD]



[Figure 52: Stephen Reich, MD]



[Figure 53: Mohan Suntha, MD]

In 2007, we completed our \$200 million bicentennial philanthropy campaign, one and a half years ahead of schedule. We have subsequently launched a \$500 million campaign, the theme of which is “Transforming Medicine Beyond Imagination.”

Three excellent examples of “transformative” research collaborations, which such campaign funds will advance, are being carried out by Drs. Richard Eckert, professor and chair of biochemistry and molecular biology, Meredith Bond, professor and chair of physiology, and Bartley Griffith, professor of surgery and head of cardiac surgery, (Figure 54) who are collaborating on a project to use stem cell technology to restore normal cardiac function following a heart attack or other heart disease.

Dr. Clare Fraser-Liggett, professor of medicine and director, Institute for Genome Sciences, and Dr. Alan Shuldiner, professor of medicine and director, Program in Genetics and Genomic Medicine (Figure 55), are working on ways to apply genomic science and genomic medicine in ways that are much more directed, or “personalized,” than are currently being practiced in medicine.

With the wars in Iraq and Afghanistan, soldiers are coming home with double, triple and even quadruple amputations and often have injuries to their face and/or other parts of their bodies as well. Dr. Stephen Bartlett, professor and chair of surgery, is leading a group working aggressively on composite tissue transplantation. Dr. Bartlett (Figure 56) believes that clinical trials on this approach could begin within a year or two.



[Figure 54: Richard Eckert, PhD, MS, Meredith Bond, PhD and Bartley Griffith, MD]



[Figure 55: Claire Fraser-Liggett, PhD and Alan Shuldiner, MD]



[Figure 56: Stephen Bartlett, MD]

University of Maryland

School of Medicine

CLINICAL HIGHLIGHTS »

Mr. Bob Chrencik was recently appointed president and chief executive officer of the University of Maryland Medical System. Following his appointment, he and I issued a joint vision letter to the University of Maryland family (Figure 57), in which we acknowledged that the School of Medicine and the Medical System, particularly the Medical Center, are interdependent and the success of one clearly enhances the success of the other.

We also affirmed our commitment to working collaboratively for continued clinical excellence and to fully maximize resources, and to investing in clinical areas with the greatest potential public health impact. We also affirmed a shared vision for improving health not only locally or regionally but also globally, while continuing to have a positive impact on the economy of the state and mid-Atlantic region.

In 2007, we had a six percent increase in growth of our clinical revenue. This past year, we had an almost 11 percent increase (Figure 58). In analyzing how this unprecedented increase in revenues occurred, we determined that almost one million patients were seen last year in our clinical practice, a two percent increase in growth from fiscal year 2007. Furthermore, we determined that there had been a 99 percent net collection rate this past year, a four percent increase over last year (Figure 59). We also reduced our days in Accounts Receivable from 57 to 53 days, a reduction of four days, and our claims denial rate decreased by 2.5 percent. Thus, there was an improvement in every measured category.

Recently, in collaboration with the Medical Center, we launched a new Clinical Programs Enhancement initiative, headed by Dr. Robert Barish, professor of emergency medicine and vice dean of clinical affairs (Figure 60). In addition, the practice plan's executive committee created three approaches to enhance our practices so that they will achieve greater accessibility, efficiency and profitability (Figure 61).

We have started work on many of these areas and are already seeing progress. For example, low-priced valet parking (Figure 62), was introduced recently and was an immediate success.

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
&
UNIVERSITY OF MARYLAND MEDICAL SYSTEM

Open Letter

UNIVERSITY OF MARYLAND MEDICINE: A SHARED VISION FOR THE FUTURE

September 19, 2008

Dear Colleagues, Students, Alumni, and Friends

As the interim President and CEO of the University of Maryland Medical System (UMMS) and Vice President of Medical Affairs for the University of Maryland and the Dean of the University of Maryland School of Medicine (SOM), we are sending you this "open letter" to outline our shared vision for the future of Maryland Medicine.

Keeping UMMS and the SOM at the vanguard of quality clinical care while maintaining our economic vitality, culture of discovery and innovation, and producing the future physicians of Maryland is our highest priority. That is why we are highly committed to working collaboratively and in a spirit of partnership. Furthermore, we will strive to more fully maximize the resources and expertise of our entire healthcare system to better serve our patients while achieving economies of scale.

As you may know, UMMS consists of the flagship 705-bed University of Maryland Medical Center in downtown Baltimore and eight high-quality community and specialty service hospitals located throughout the state. These include the Baltimore Washington Medical Center, Maryland General Hospital, Kernan Hospital, University Specialty Hospital, and Mount Washington Pediatric Hospital, located in the Baltimore region, and Shore Health System Hospitals and the Chester River Hospital Center, located on Maryland's Eastern Shore.



With its 11,500 employees, UMMS is the state's third largest private employer and provides a full range of health care services to more than 600,000 patients each year. Closely affiliated with this large enterprise is the SOM.

In the UMMS system, the University of Maryland Medical Center (UMMC) has a special linkage with the SOM due to their close physical proximity and the fact that all of the physicians who practice at UMMC are employed by and are members of the SOM faculty. This linkage between UMMC and SOM forms what is known as an "academic medical center."

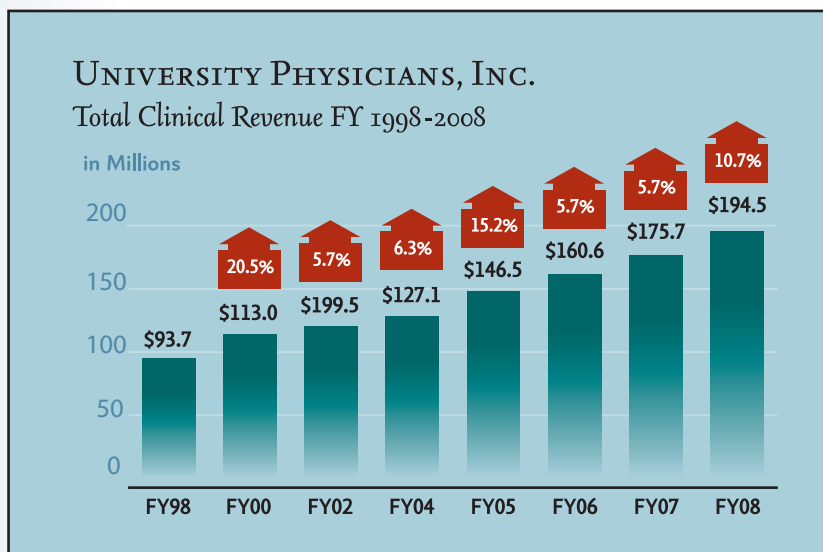
Our academic medical center benefits each of the UMMS member hospitals by providing them access to resources, capital, and research-based innovations in patient care. It also benefits the state and surrounding mid-Atlantic region by training more than half of the physicians who practice in the state of Maryland and generating nearly \$5 billion in economic activity each year.

The prestigious Leapfrog Group, an independent patient advocacy organization, recently rated UMMC—and its SOM doctors—as one of the top-50 acute care hospitals in the nation for quality care and patient safety. The SOM ranks in the top 10 percent of the 76 public medical schools and in the top 15 percent among all 129 medical schools in the nation based upon the American Association of Medical College's ranking of research grant and contract expenditures.





[Figure 57: UMMS-SOM vision letter]



[Figure 58: UPI total clinical revenue, FY 1998-2008]

PRACTICE PLAN PERFORMANCE

University Physicians, Inc. Scorecard

	National Benchmark	FY07	FY08	Change
Net Collection Rate	97%	95%	99%	↑ 4%
Days in Accounts Receivable	40-50	57	53	↓ 4 days
Claim Denial Rate	7%	17%	12%	↓ 5%

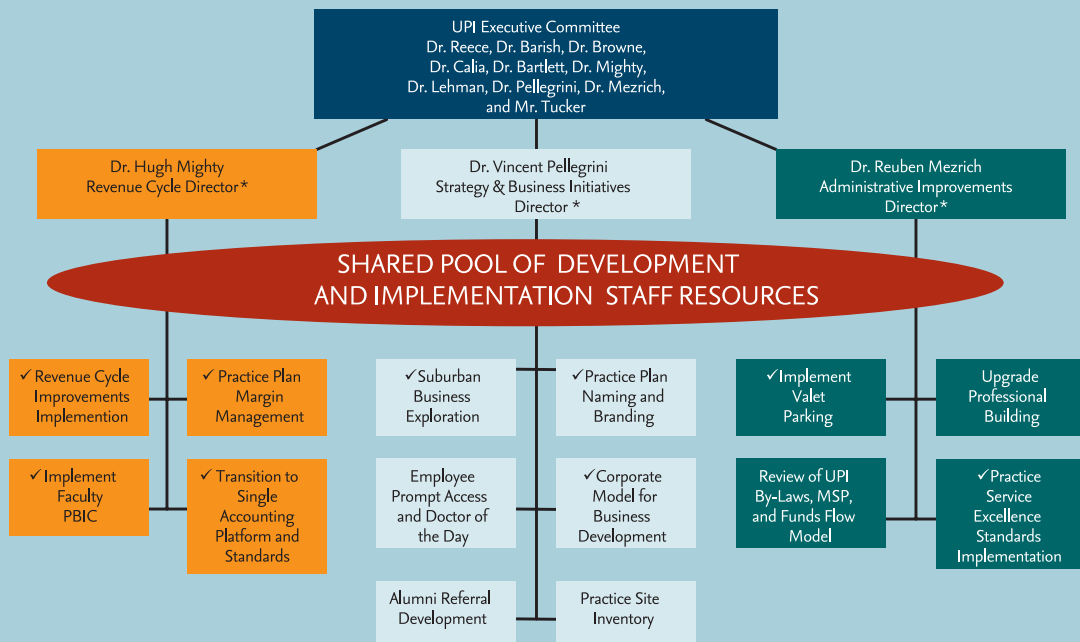
Improvement in Every Category!



[Figure 60: Robert Barish, MD, MBA]

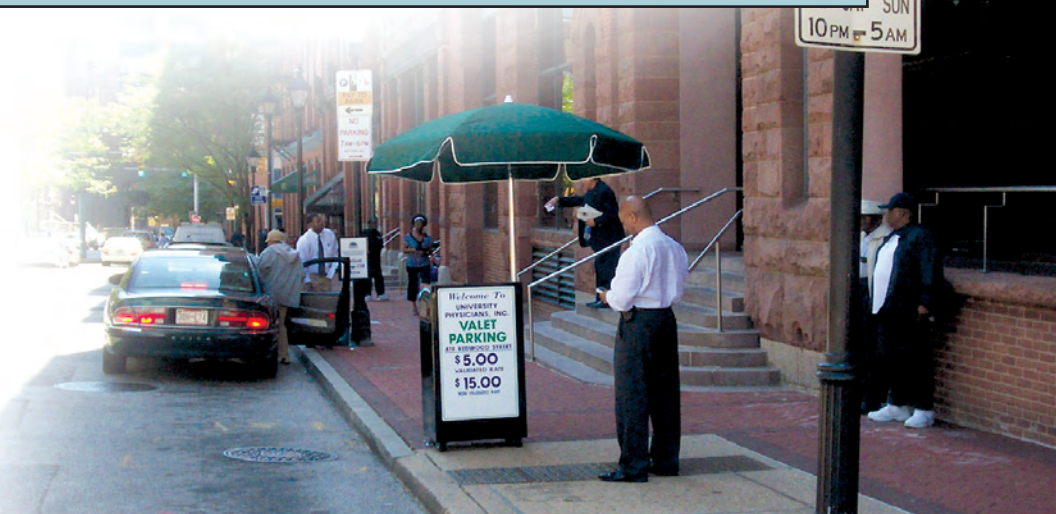
[Figure 59: Practice plan performance]

UPI TRANSITION INITIATIVES



*Working with Bob Barish, MD, and Bill Tucker for coordination and execution

[Figure 61: Practice plan transition initiatives]



[Figure 62: UPI valet parking]

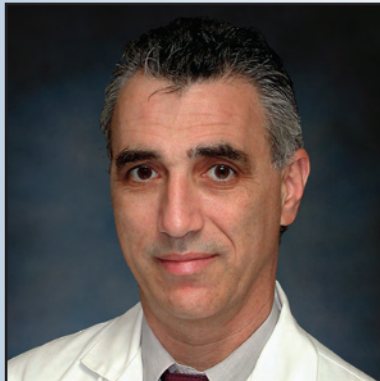
FACULTY HIGHLIGHTS »

I want to share with you just a few faculty highlights:



[Figure 63: Jay Magaziner, PhD, MSHyg]

Jay Magaziner, PhD, MSHyg, was appointed chair of the Department of Epidemiology and Preventive Medicine (Figure 63). He began his tenure on March 1, 2008. Dr. Magaziner, a distinguished scholar, has had continuous NIH funding. His work on hip fracture and hip fracture recovery have earned him an unprecedented two consecutive MERIT awards from the National Institute on Aging.



[Figure 64: Thomas Scalea, MD]

Thomas Scalea, MD, professor, Department of Surgery, and director, Program in Trauma (Figure 64), and



[Figure 65: Peter Rock, MD, MBA]

Peter Rock, MD, MBA, professor and chair, Department of Anesthesiology (Figure 65), were named co-directors of the newly-formed Center for Trauma and Anesthesiology Research. The Center is a world-class, multi-disciplinary research and educational center focusing on brain injuries, critical care and organ support, resuscitation, surgical outcomes, patient safety and injury prevention. It is the first research center in the nation dedicated exclusively to the study of trauma, its complications and prevention.



[Figure 66: Bruce Jarrell, MD, FACS]

Bruce Jarrell, MD, FACS, professor of surgery and formerly senior associate dean for research and academic affairs (Figure 66), was promoted to executive vice dean of the School of Medicine. Dr. Jarrell will have broad responsibilities in the School of Medicine, although he will continue to emphasize research and academic administration as primary areas of emphasis.



[Figure 67: Nicholas Ambulos, PhD]

Nicholas Ambulos, PhD, associate professor, Department of Microbiology & Immunology (Figure 67), was appointed executive director of the Research Core Facilities. In his new role, Dr. Ambulos will be responsible for unifying and streamlining the business practices of a number of core facilities, which are fundamental to basic science research. His oversight will ensure the scientific direction of each core facility is meeting the needs of the research faculty.



[Figure 68: Thomas Hooven, MA]

Thomas Hooven, MA, was appointed executive director for Research Administration (Figure 68). In this position, Mr. Hooven fosters new and existing collaborations across the University of Maryland, Baltimore campus and the University of Maryland Medical System hospitals in order to facilitate research efficiency and effectiveness, resolve problems, identify new program opportunities, improve support services for faculty and increase core facilities effectiveness.



[Figure 69: Claudia Baquet, MD, MPH]

Claudia Baquet, MD, MPH, professor, Department of Medicine, and associate dean for Policy & Planning, was named director, Program in Minority Health & Health Disparities (Figure 69). In this role, she seeks to reduce and eventually eliminate health disparities. Dr. Baquet, a distinguished scholar, focuses on issues relating to the health needs of and models for underserved communities, telemedicine and rural health initiatives. Her annual grant funding is in excess of \$7 million per year, and she has an unprecedented record in her 13-year tenure of securing close to \$18 million in NIH grants alone.



[Figure 70: Hugh Mighty, MD, MBA, FACOG]

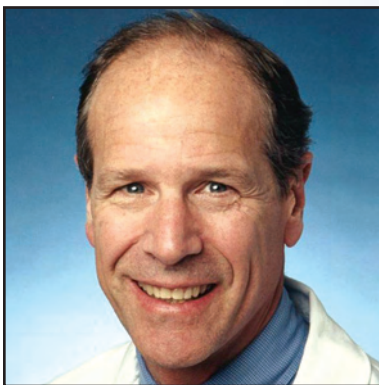
Hugh Mighty, MD, MBA, FACOG, associate professor and chair, Department of Obstetrics, Gynecology and Reproductive Medicine (Figure 70), received the Martin Luther King, Jr. Diversity Award from the University of Maryland, Baltimore, for inspiring others to achieve harmony and diversity.



[Figure 71: J. Marc Simard, MD, PhD]



[Figure 72: Robert Barish, MD, MBA]



[Figure 73: Bartley Griffith, MD]

At last year's Founders Day celebration, J. Marc Simard, MD, PhD, professor, Department of Surgery (Figure 71), received the UMB Founder's Day Research Lecturer of the Year award, and Robert Barish, MD, MBA, vice dean for Clinical Affairs and professor, Department of Emergency Medicine (Figure 72), received the Founder's Day Public Servant of the Year award. Dr. Barish also received the University System of Maryland's Regents' Award for Public Service. Bartley Griffith, MD, professor, Department of Surgery (Figure 73), received the Scholarship Excellence Award from the University System of Maryland Board of Regents.



[Figure 74: Gina Perez, MD]



[Figure 75: Larry Anderson, PhD]



[Figure 76: Donna Hanes, MD]

Gina Perez, MD, assistant professor, Department of Psychiatry, and assistant dean for Student Affairs (Figure 74), was selected by the Class of '08 to address the graduating class at precommencement. Larry Anderson, PhD, professor, Department of Anatomy & Neurobiology (Figure 75), received the Golden Apple Award for pre-clinical education, and Donna Hanes, MD, associate professor, Department of Medicine (Figure 76), received the Golden Apple Award for clinical education.



[Figure 77: Renee Fox, MD]

Renee Fox, MD, associate professor, Department of Pediatrics (**Figure 77**), became the first faculty member from the School of Medicine to receive a Robert Wood Johnson Health Policy Fellowship.



[Figure 78: Mordecai Blaustein, MD]

Mordecai Blaustein, MD, professor, Department of Physiology (**Figure 78**), received the American Heart Association's Novartis Award for Hypertension Research. The award, one of the highest honors in the hypertension research field, recognizes Dr. Blaustein's groundbreaking discoveries exploring the biological mechanisms by which salt raises blood pressure.



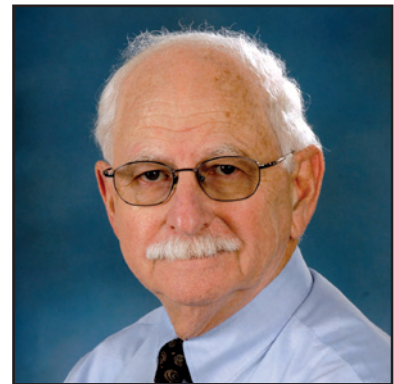
[Figure 79: Donald Wilson, MD, MACP]

Donald E. Wilson, MD, MACP, dean emeritus (**Figure 79**), received the 2008 Association of American Medical Colleges' Abraham Flexner Award for Distinguished Service to Medical Education. The award recognizes extraordinary individual contributions to medical schools and to the medical education community as a whole. Dr. Wilson was also recognized for the impact he made on medical education at the national level.

BOARD OF VISITORS »



[Figure 80: Peter Angelos, Esq.]



[Figure 81: Ronald Goldner, MD]



[Figure 82: John Kelly]

And finally, last year we welcomed three new members to our Board of Visitors. Peter Angelos, Esq., president, Law Offices of Peter G. Angelos, PC, and chairman and CEO of the Baltimore Orioles (**Figure 80**), Ron Goldner, MD, '65, clinical professor of dermatology and 134th president of the Medical Alumni Association (**Figure 81**), and John Kelly, president and senior consultant of Kelly Benefit Strategists (**Figure 82**).

COMMUNITY SERVICE AND OUTREACH »

LEGISLATIVE DAY

We held our second annual Legislative Day in Annapolis (Figure 83). We had 60 meetings with legislators and their staffs, including the Speaker of the House and the President of the Senate. Our agenda included sharing with them what's happening at the School of Medicine and how much we appreciate their support.

MINI MED SCHOOL

We held our 8th annual Mini-Med School, where we provided health maintenance and disease prevention education to our neighbors throughout the community. We also hold Mini-Med School programs throughout the state, and it has been an extremely successful outreach program over the years, serving more than 3000 Marylanders since 2001 (Figure 84).



[Figure 83: SOM Legislative Day participants]

MINI-MED SCHOOL PARTICIPATION

More students participating from elementary to college level

	2005	2006	2007	2008
Baltimore	165	150	200	300
Baltimore (elementary/middle)	-	-	35	40
Baltimore (high school)	20	105	85	100
Eastern Shore	140	105	105	120
Montgomery County/Spanish	270	-	-	-
Southern Maryland	-	15	-	-
Western Maryland	180	150	140	154
Totals	675	525	565	714

[Figure 84: Mini-Med school participants since 2005]

THE SCHOOL OF MEDICINE'S GLOBAL REACH

[Figure 86: University of Maryland School of Medicine in 23 countries around the globe]



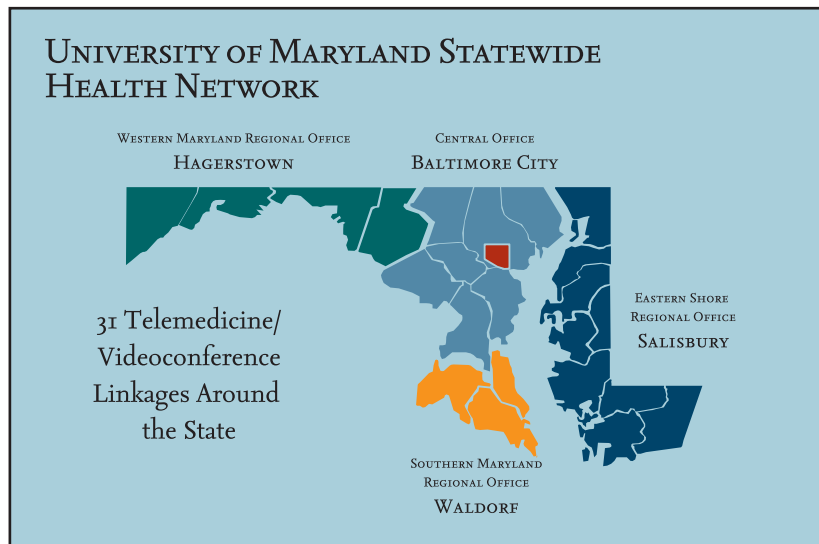
STATEWIDE AND GLOBAL OUTREACH

The School of Medicine is not just a Baltimore institution. In addition to its central Baltimore office, the University of Maryland Statewide Health Network has a Western Maryland Regional Office, an Eastern Maryland Regional Office, and a Southern Maryland Regional Office (Figure 85). Through these four offices, we provide disease prevention, patient education, and remote diagnostic and therapeutic services throughout the entire state.

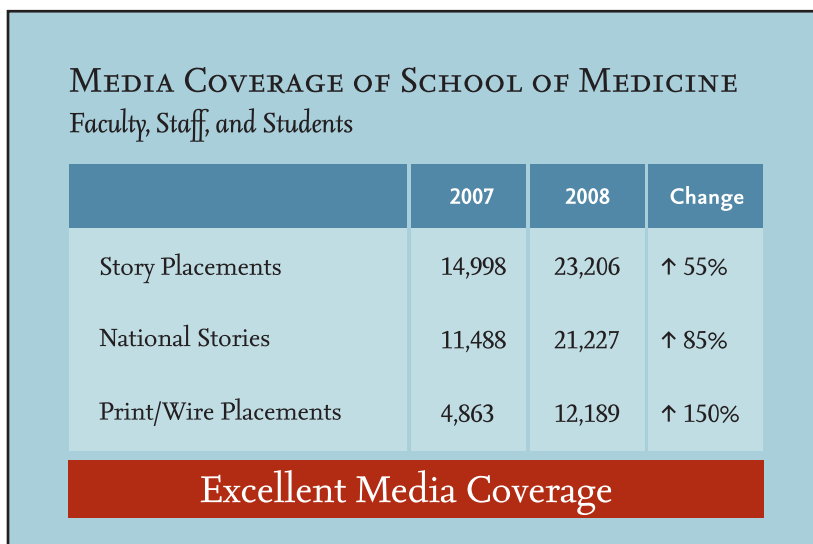
Our community also extends beyond the state of Maryland. We are currently in 23 countries around the globe (Figure 86). The Institute for Human Virology and the Center for Vaccine Development are the two main groups at the School of Medicine who account for the majority of this global activity.

MEDIA COVERAGE

During the past year, the School of Medicine has had extensive national media coverage. The number of media placements went up 55 percent, to 23,000. There were over 21,000 national stories, an 85 percent increase from last year, and the number of print and wire placement stories exceeded 12,000, a 150 percent increase from last year (Figure 87).



[Figure 85: University of Maryland Statewide Health Network]



[Figure 87: 2008 media coverage of School of Medicine faculty, staff and students]

THE CHALLENGES AHEAD »

We've clearly had a great year. However, in looking to the future, there are significant challenges ahead. We need to think about how to increase the competency of our students. In addition, the debt load of medical students is not expected to lessen in the foreseeable future, and we also need to find ways to support exceptional teachers.

Clinical competition is increasing, and there is an increase in competition for the recruitment and retention of faculty. Space constraints are another potential challenge. The lack of a national health-care policy, declining Medicare funding, state budget cuts, and flat or declining NIH research funding will all present major challenges in the coming year.

In regard to research challenges, we have created a research road map that includes strategies to:

- » Support and retain currently funded researchers;
- » Mentor non-funded researchers toward funding and success;
- » Support collaborative, interdisciplinary research programs; and
- » Develop and fulfill NIH's vision for clinical and translational science. The idea is to create a collaborative network that will nurture and "grow" our young scientists.

Despite the challenges, we are continuing to target a five percent or more rate of growth in research funding and will use various strategies to achieve that target. We realize that this goal will be difficult to achieve, but we want to make every effort to achieve our goal.

In regard to finance, we currently are:

- » Implementing a SOM-wide performance-based incentive compensation plan;
- » Significantly increasing our cash reserves; and
- » Advancing a new philanthropy campaign entitled "Transforming Medicine Beyond Imagination."

To meet our clinical challenges, we will use our clinical practice road map to:

- » Enhance our focus on patient-centered care;
- » Increase the number of clinical magnet programs;
- » Maximize clinical partnerships and affiliations with UMMS/UMMC, VA and other clinical partners; and
- » Address declining reimbursement via new strategic initiatives.

We are in the midst of creating an education road map that will attempt to emphasize more scholarships and professorships to support exceptional teaching and to establish more joint degree programs.





CONCLUSION »

The future is challenging, but I believe that we are well-positioned to confront these challenges and prevail. We will work as a team to be stronger and will remain focused on our sense of purpose. Together, we'll use our past accomplishments to build a school that is ready for the future. Together, we'll use our building blocks to help us climb higher and higher and help us move toward greater and greater success.

This year has been an extraordinary year in many ways, and I am extremely grateful for the success this school has experienced. I want to extend to the School of Medicine leadership team, faculty, staff, students, alumni, board members, partners and friends a most sincere and heart-felt "thank you" for your support and dedication to this excellent, top-tier medical school.

Sincerely,

E. ALBERT REECE, MD, PHD, MBA

Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor and
Dean, University of Maryland School of Medicine



UNIVERSITY OF MARYLAND
SCHOOL OF MEDICINE

OUR MISSION

THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE IS DEDICATED TO PROVIDING EXCELLENCE IN BIOMEDICAL EDUCATION, BASIC AND CLINICAL RESEARCH, QUALITY PATIENT CARE AND SERVICE TO IMPROVE THE HEALTH OF THE CITIZENS OF MARYLAND AND BEYOND. THE SCHOOL IS COMMITTED TO THE EDUCATION AND TRAINING OF MD, MD/PHD, GRADUATE, PHYSICAL THERAPY AND REHABILITATION SCIENCE, AND MEDICAL RESEARCH TECHNOLOGY STUDENTS. WE WILL RECRUIT AND DEVELOP FACULTY TO SERVE AS EXEMPLARY ROLE MODELS FOR OUR STUDENTS.

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

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