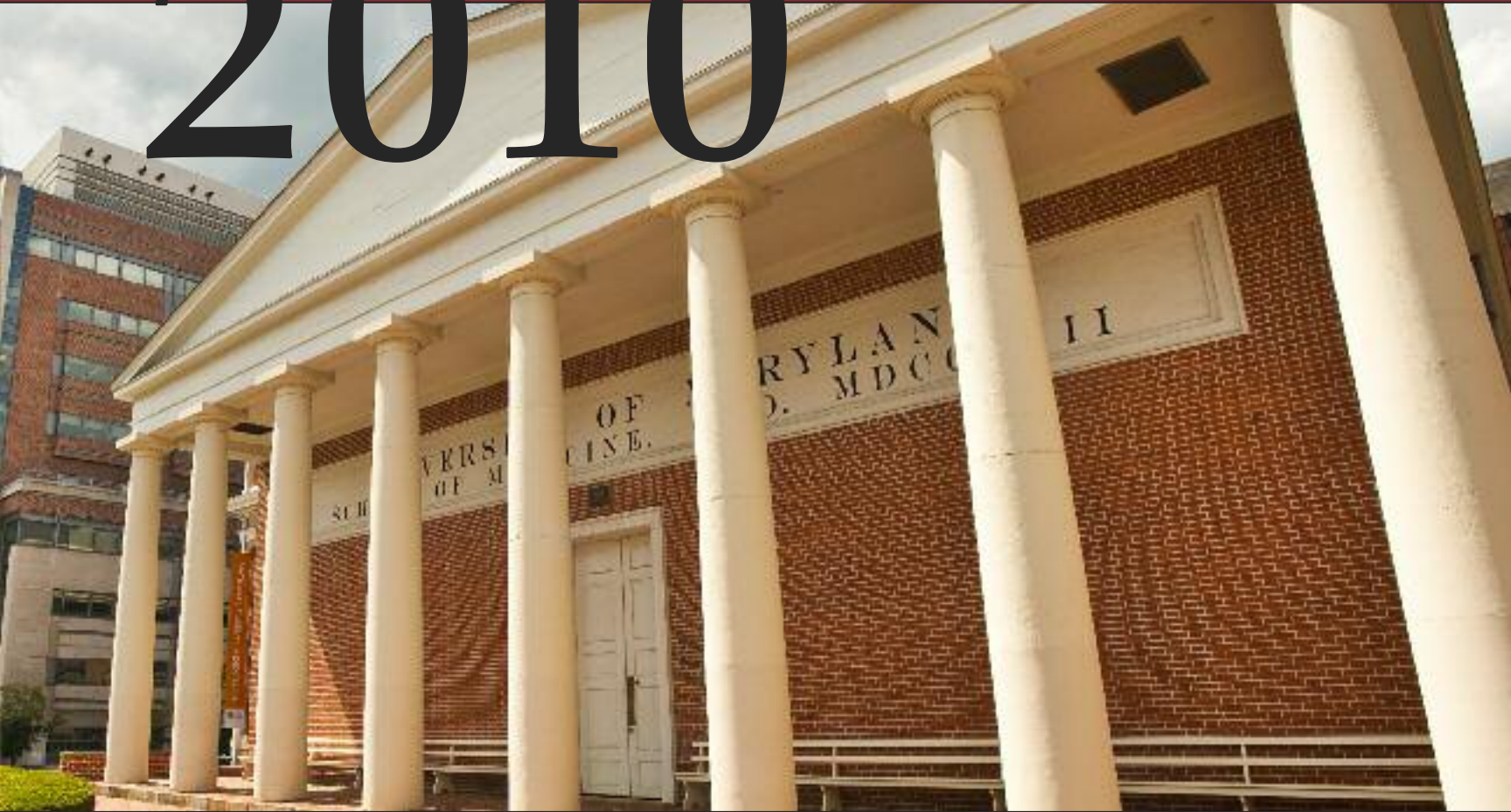


University of Maryland SCHOOL OF MEDICINE
State of the School Address



2010



Working Together Bringing Out the Best

"Like a gear, each of us has a specific identity and job to perform, but we are coupled together to obtain the best performance. We all actively worked together to maintain our trajectory of successes and accomplishments. We are greater than the sum of our individual efforts."





OUR MISSION

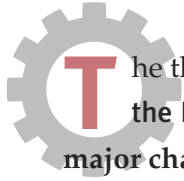
The University of Maryland SCHOOL OF MEDICINE is dedicated to providing excellence in biomedical education, basic and clinical research, quality patient care and service to improve the health of the citizens of Maryland and beyond. The school is committed to the education and training of MD, MD/PHD, Graduate, Physical Therapy and Rehabilitation Science, and Medical and Research Technology students. We will recruit and develop faculty to serve as exemplary role models for our students.



2010

Working Together

Bringing Out the Best

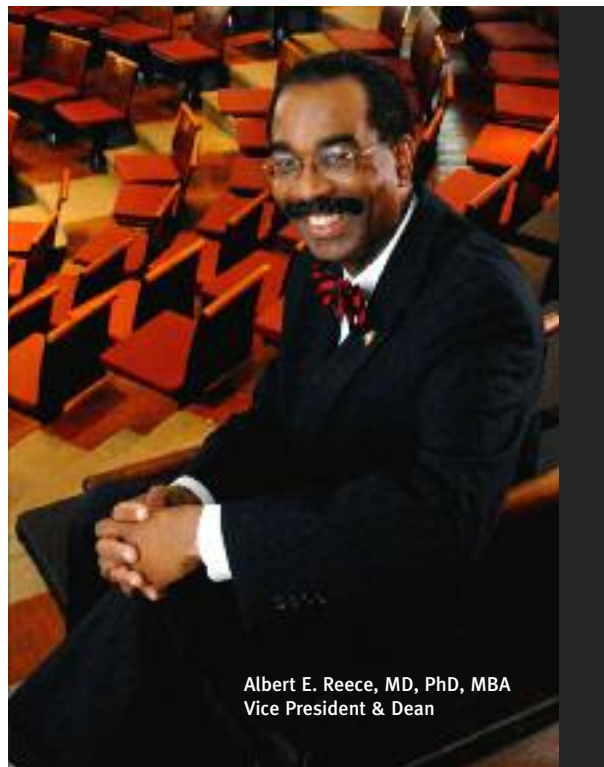


The theme of the 2010 State of the School Address is **Working Together, Bringing Out the Best.** I recognize that this past year was a difficult one, as we experienced **major challenges on multiple fronts. Some are longstanding, while others were new and unexpected.** The economic recovery was slow and continued to be a source of pressure. Fundraising remained challenging due to the overall economic climate. We had to use creative solutions to deal with ongoing state budget cuts. We were confronted with our third year of temporary salary reductions. In addition, our research programs remain in desperate need of more space, and the larger our research enterprise grows the greater our space deficit becomes. Adding insult to injury, we had two record breaking blizzards, which resulted in snowfall that closed our campus for nearly a week.

Regrettably, all of these challenges had a negative impact on the clinical revenue for the practice plan and the Medical System. **Despite these challenges, working together indeed brought out the very best in us, and enabled the School of Medicine to prevail in all its mission areas.** When we maintain our vision and our resolve to achieve our goals, not only do we achieve those goals, but such efforts bring out the very best in us.

Permit me to use an analogy to illustrate the theme of my presentation. **A gear, as you know, is a rotating machine that has teeth or cogs which interconnect with each other in order to move a large machine.** The School of Medicine can be likened to a large machine with many moving gears, and which works well only when all the gears are in sync, thus allowing the entire machine to work both effectively and robustly. The interesting thing about gears is that when you interlock the teeth of the gears and turn one gear, the next gear will turn as well. So turning one gear could potentially set in motion the entire system, and when all gears are turning, and, indeed, working together, the machine is working at its best.

Each area within the School of Medicine is a unique part of the whole, and like a gear, each of us has a specific identity and a specific job to perform, but when we are coupled together we receive or obtain the very best performance. Each of us affects the other, and when we work together we bring out the best in each other, and, indeed, in the school as a whole. This year the turning of our gears toward our goals created a type of syn-



Albert E. Reece, MD, PhD, MBA
Vice President & Dean

ergy that brings about success in spite of the many difficulties we faced along the way. **We all actively worked together in our attempt to maintain our trajectory of successes and accomplishments. The result of working together was, in fact, greater than the sum of our individual efforts.** It is therefore my pleasure to share with you how we worked together through a difficult time and reached our goals. What follows is just a sample of some of the School of Medicine's outstanding accomplishments of the past year.



Kevin Cullen, MD
Professor & Director,
UM Greenebaum Cancer Center,
NCI Designated

7,200 INDIVIDUALS WORKING TOGETHER



Workforce

The School of Medicine has a total workforce of approximately 7,200 people, comprised of faculty members, clinical and research fellows, residents and staff **FIGURE 1**. Thirty six percent are women, and eight percent are underrepresented minorities **FIGURE 2**. Our retention rate remains high at 90 percent, which is extraordinarily encouraging, as it really speaks to the nurturing and collaborative environment in which we work.

FIGURE 1

	2009	2010	
Full-Time Faculty	1,229	1,296	} 2,800
Part-Time Faculty	253	248	
Adjunct Faculty	1,196	1,256	
Clinical Fellows*	213	209	} 545
Research Fellows	288	336	
Residents*	569	577	} 3,268
Staff	2,297	2,308	
University Physicians, Inc. Staff	917	960	
TOTAL INDIVIDUALS	6,962	7,190	

*University of Maryland Medical Center pays salaries of most

FIGURE 2

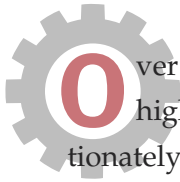
BREAKDOWN OF Full-Time Faculty

	FY2009	FY2010
TOTAL FULL-TIME FACULTY	1,229	1,296
Women	434 (35.3%)	469 (36.2%)
Underrepresented Minorities	100 (8.1%)	108 (8.3%)
~90% RETENTION RATE OF FULL-TIME FACULTY		



Claudia Baquet, MD
Professor & Associate Dean,
Policy and Planning

Education



Over 42,000 students applied to medical schools across the country (one percent higher than the prior year), and the University of Maryland received a disproportionately high number of those applications **FIGURE 3**. **This past year we had nearly 5,000 applicants, which is an eight percent increase over the previous year, and we accepted 160 students for the Class of 2013.** These first year medical students came from 79 colleges and universities, although most are Marylanders, and they ranged in age from 21 to 34 **FIGURE 4**. Approximately eight percent are underrepresented in medicine, and nearly 60 percent are female. **Most importantly, we have a very scholarly group with grade point averages and MCAT scores that exceed the national average.** The School of Medicine's total student enrollment is 1,282, just under half of whom are medical students **FIGURE 5**. The remaining half is comprised of MD/PhD, graduate, genetic counseling, physical therapy, medical and research technology and public health students. We have always been proud of our student diversity school-wide **FIGURE 6**.

FIGURE 3

U.S. MEDICAL SCHOOL Applications

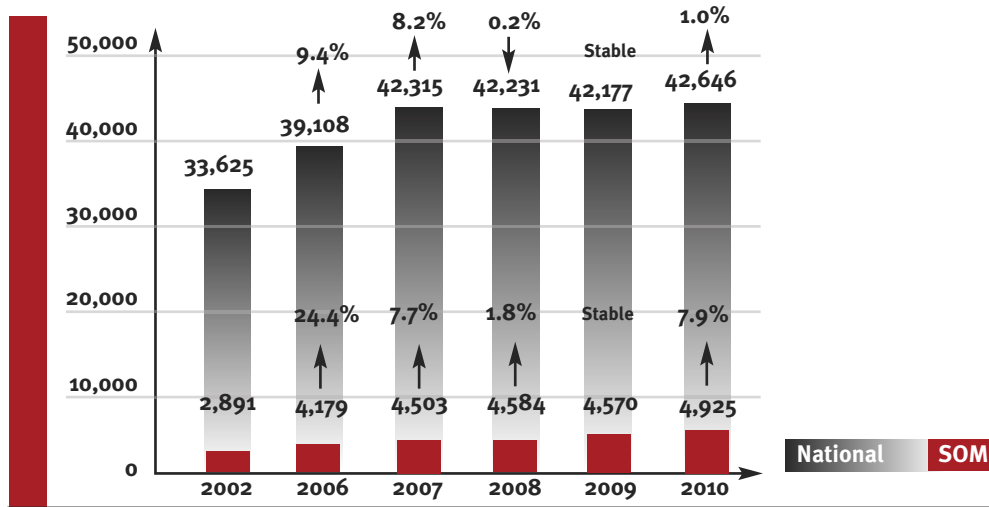
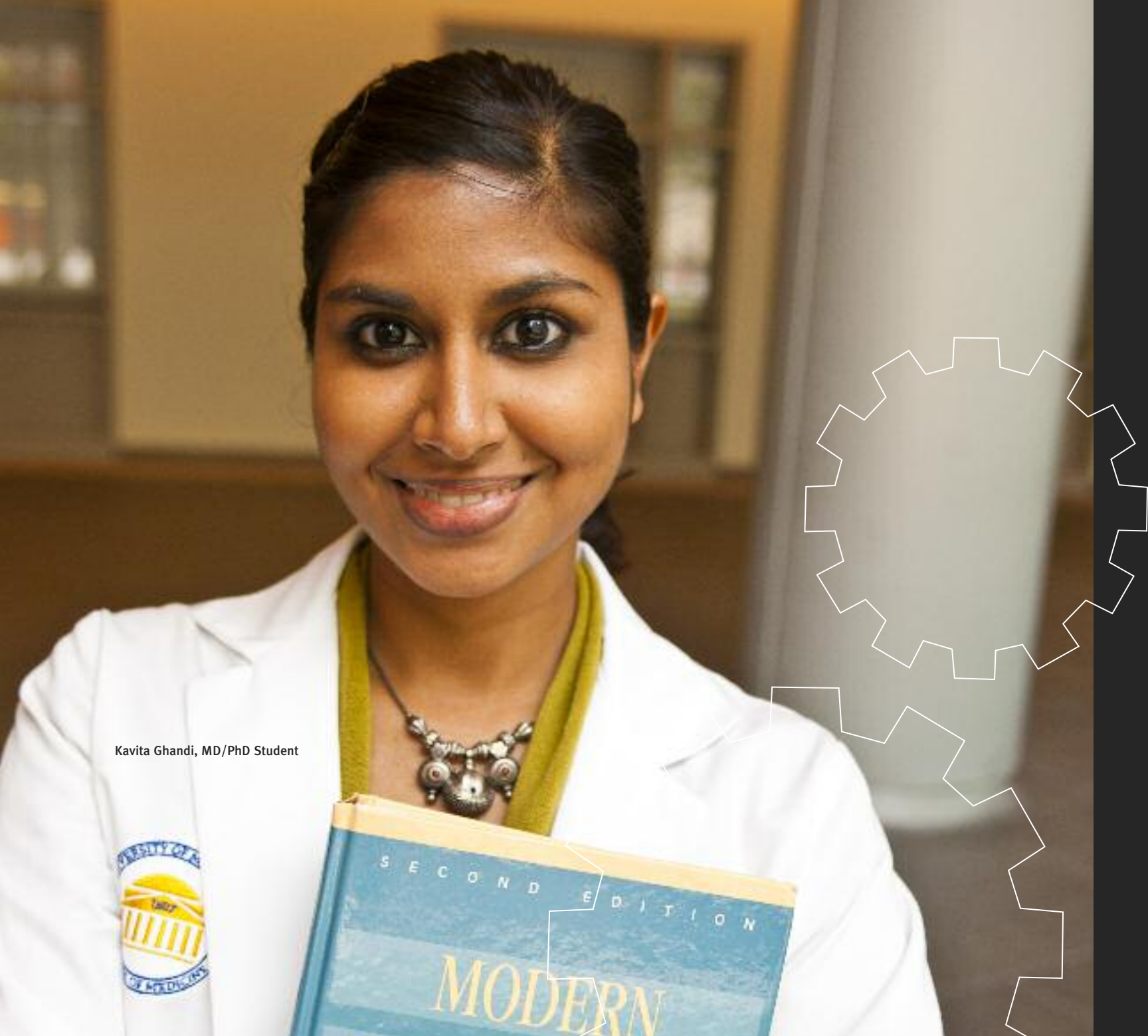


FIGURE 4

2010 FIRST-YEAR STUDENT Statistics

- 4,925 total applications for class of 160 students
 - 68 colleges/universities represented
 - Ages range from 21 to 34 years
 - 78% are Maryland residents; 22% are non-residents
 - 8% are underrepresented in medicine
 - 58% are female; 42% are male
 - Overall average GPA is 3.72
 - Average MCAT score is 32
- } Above National Average

"We continue to make significant strides in increasing the diversity of our faculty, staff and students."



Kavita Gandhi, MD/PhD Student

5,000 STUDENT APPLICANTS

FIGURE 5

TOTAL STUDENT Enrollment

Medical, Graduate, Allied Health and Public Health

STUDENTS	2009	2010
Medical (MD)	631	625
MD/PhD	32	35
Graduate (MS/PhD)	318	333
Physical Therapy (DPT/PhD)	180	168
Genetic Counseling (MS)	12	12
Public Health (MPH)	37	54
Medical and Research Tech (BS/MS)	78	55
TOTAL	1,288	1,282

FIGURE 6

STUDENT Diversity

Percent of Minorities in the 2010 Programs*

Medical (MD)	15%
MD/PhD	20%
Graduate (MS/PhD)	15%
Physical Therapy	11%
Public Health	30%
Medical & Res Tech	38%

*Includes Native American, African American and Hispanic American

Today students come to medical school with very different interests than they did 20 years ago. There is a greater plurality of interests now, as students sometimes go to medical school before establishing a career in politics, health policy or public health. So we have adjusted our curriculum in order to respond to the growing demand for joint degree programs. **We currently have nine existing joint degree programs — two doctorate programs (MD/PhD and MD/DDS, the latter in collaboration with the Dental School) and seven MD/Masters degree programs — with two additional programs under discussion** FIGURE 7. We were very pleased when our new Masters of Public Health program (MPH), which resides in our newly-named Department of Epidemiology and Public Health (previously epidemiology and preventive health) received a five-year accreditation, which is quite an accomplishment.

Match Day is a big day for medical students — it is the day when graduating medical students across the country find out where they will spend the next three to

six years of residency. **This year, 44 percent of our students matched in primary care, and 56 percent matched in the surgical fields** FIGURE 8. The most exciting day for our students is obviously graduation. Last year we graduated 269 students, and 160 of them were medical students, plus one MD/PhD student FIGURE 9. This was the largest graduating class of medical doctors in our history, due to the fact that we increased our class size in response to the expected national physician shortage. **The keynote speaker for convocation was Neal Baer, MD, EdM, AM, a pediatrician who is probably better known for his work as executive producer of the hit television dramas *Law & Order: Special Victims Unit (SVU)* and *ER*** FIGURE 10. We also graduated students from our other programs: there were 51 physical therapy graduates FIGURE 11; 6 genetics counseling graduates FIGURE 12; 38 medical and research technology graduates FIGURE 13; and 13 public health graduates FIGURE 14.

The University of Maryland Medical Alumni Association (MAA) celebrated its 135th reunion this past year with honors and awards to some very special alumni. **Elijah Saunders, MD, '60**, professor of medicine, celebrated his 50th anniversary and received the two highest awards from the MAA — the Honor Award and the Alumni Gold Key FIGURE 15. In addition, **we established the School of Medicine Alumni Leadership Award** and gave the inaugural awards to three of our most distinguished alumni, also celebrating their 50th medical school reunion from the class of '60 FIGURE 16. **Alan Myers, MD**, was former dean at Temple University School of Medicine, **Bernice Sigman, MD**, was an associate dean for Medical Education here at the University of Maryland School of Medicine, and **Morton Rapoport, MD**, was vice dean of the School of Medicine, and the first president and CEO of the University of Maryland Medical System.

FIGURE 7

MULTIPLE Joint Degrees

MD/PhD; MD/MS; MD/MPH; MD/MBA; PhD/Masters

EXISTING *
• Science (MD/PhD)
• Dentistry (MD/DDS)
• Public Health (MD/MPH)
• Bioengineering (MD/MS BioE)
• Public Policy (MD/MPP)
• Epidemiology (MD/MS Epi)
• Clinical Research (MD/MS Clin Res)
• Health Services Administration (MD/MHA)
• Business Administration (MD/MBA)
UNDER DISCUSSION
• Bioethics (MD/MS)
• Graduate Program in Life Sciences (PhD/MPH; PhD/MS Epi; PhD/MS Clin Res)

*Listed by <http://aamc.org> for entering class 2010

FIGURE 8

MARCH 18, 2010 Match Day Results

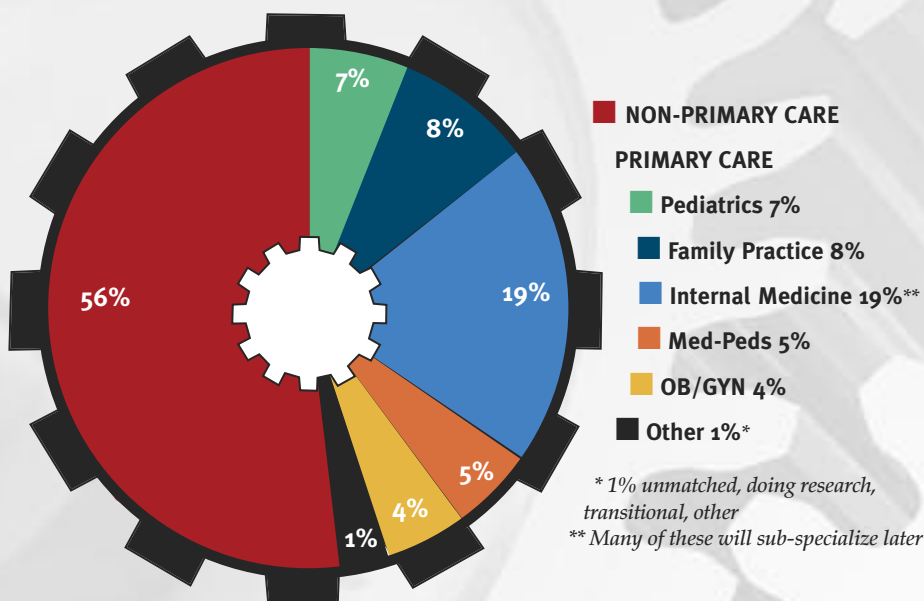


FIGURE 9

TOTAL Graduates

Programs	2009	2010
MD	135	160
MD/PhD	5	1
Physical Therapy	46	51
Genetic Counseling	5	6
Medical and Research Technology	37	38
Public Health	6	13
Total Graduates	234	269



FIGURE 10
Graduation Speaker: Neal Baer, MD and Dean Reece at UM School of Medicine Convocation



FIGURE 13
38 medical and research technology graduates



FIGURE 11
51 physical therapy graduates



FIGURE 14
13 public health graduates



FIGURE 15
Elijah Saunders, MD, '60 (left), receives highest award



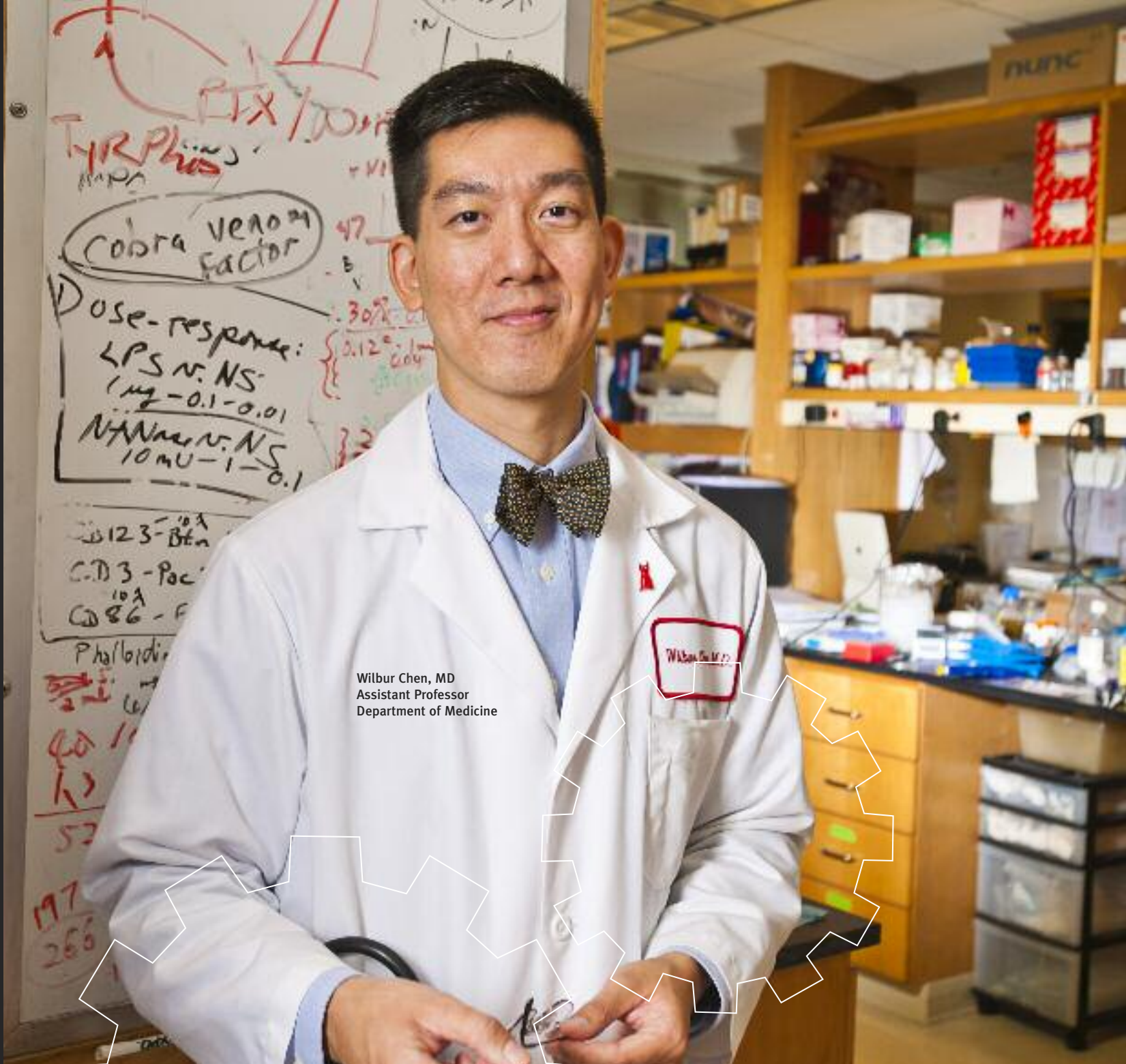
FIGURE 12
Six genetics counseling graduates



FIGURE 16
Drs. Reece, Myers, Sigman and Rapoport

269 GRADUATES AT CONVOCATION



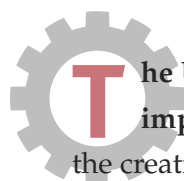


Wilbur Chen, MD
Assistant Professor
Department of Medicine

\$ 4 7 9 MILLION RESEARCH GRANTS & CONTRACTS



Research



The University of Maryland School of Medicine's research vision is to increase the impact of research and discovery on human health. We intend to do this through the creation of magnet programs emphasizing fundamental and translational research, through increased collaboration and consortia grants, enhanced faculty recruitment and retention, and of course we also intend to continue to increase our national rankings

FIGURE 17. It is important to understand that we view funding — a surrogate of program excellence — as the fuel that drives our research engine.

As you may know, the University of Maryland Biotechnology Institute (UMBI) was reorganized by the UM Board of Regents last year and the **School of Medicine was pleased to welcome 14 new faculty and to receive \$6.1 million in research funding.** Seven of these faculty will now have their academic homes in the departments of Biochemistry & Molecular Biology and Microbiology & Immunology, and together form the new **Program in the Biology of Model Systems** **FIGURE 18.** They are located downtown at the Inner Harbor at the Columbus Center where they were previously located. The next group of seven faculty will now have their academic homes in the

departments of Physiology, Anatomy & Neurobiology and Biochemistry & Molecular Biology, and they have formed a **new enterprise called the Center for Biomedical Engineering and Technology (BioMET)** **FIGURE 19.**

I indicated previously that grant funding is the fuel that drives our programs and the means of evaluating our excellence. **In 2009 we received \$426 million in grants and contracts, a 13 percent increase over the previous year** **FIGURE 20.** This past year we received **\$479 million, a 12.5 percent increase over last year,** which is tremendous growth, particularly in these challenging times. Our faculty deserve hearty congratulations for this extraordinary performance.

FIGURE 17 RESEARCH Vision & MAJOR RESEARCH Programs

INCREASE THE IMPACT OF RESEARCH AND DISCOVERY ON HUMAN HEALTH

- Create and/or expand research magnet programs and funding
- Increase emphasis on translational research
- Increase emphasis on collaboration and multi-disciplinary groups
- Increase consortia grants and contracts
- Enhance faculty recruitment and retention
- Achieve Top-10 ranking

MAJOR PROGRAMS (BASED ON FUNDING)

- AIDS/HIV
- Aging
- Bioterrorism Defense
- Cardiovascular Care
- Cancer
- Community Mental Health
- Diabetes
- Disparities
- Genomics
- Infectious Diseases
- Metabolic Disorders
- Schizophrenia
- Transplant
- Trauma
- Vaccines

FIGURE 18

The new Program in the Biology of Model Systems



Top: Gerardo Vasta, PhD; Second row: Frank Robb, PhD, Shaojun Jim Du, PhD; Third row: Zev Pancer, DSc, Ahmed Hafiz, PhD; Bottom row: Jose Fernandez-Robledo, PhD

FIGURE 19

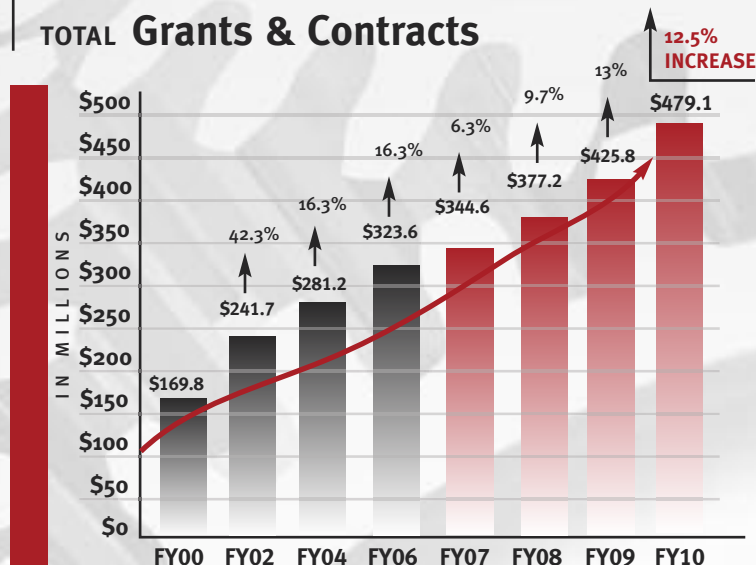
The new Center for Biomedical Engineering and Technology (BioMET)



Back row L-R: John Collins, PhD, Bruce Vogel, PhD, Mariusz Karbowski, PhD, Shengyun Fang, PhD, Ilia Baskakov, PhD, Xuehong Xu, PhD; Front row L-R: Joseph Kao, PhD, W. Jonathan Lederer, MD, PhD, Mervyn Monteiro, PhD

FIGURE 20

TOTAL Grants & Contracts



Since 2000, SOM has received \$3.4 billion in total grants & contracts and \$1.5 billion in NIH funding

Research HIGHLIGHTS

TOP GRANT AWARDEES IN 2010

This section features the outstanding work of just a few of our investigators who secured very large and prestigious grants last year. Featured here are investigators who received NIH grants, non-NIH grants, three or more existing NIH RO1 grants, research cooperative agreements, young investigators who secured their first NIH R01 grants and American Recovery & Reinvestment Act grants.

Largest NIH Grants

FIGURE 21



JACQUES RAVEL, PhD, associate professor, Department of Microbiology & Immunology, and Institute for Genome Sciences, was co-principal investigator on a five-year \$12.2 million grant from the National Institute for Allergy and Infectious Diseases (NIAID) to study the genomics of Chlamydia.

FIGURE 22



STEVEN KITTNER, MD, MPH, professor, Department of Neurology, received a four-year \$9.8 million grant from the National Institute of Neurological Disorders and Stroke for an ischemic stroke genome-wide association study.

FIGURE 23



JAMES KAPER, PhD, professor and chair, Department of Microbiology & Immunology, received a five-year \$7.5 million grant from the NIAID to study severe enteric disease: pathogenesis and response.

FIGURE 24



MIRIAM LAUFER, MD, assistant professor, Department of Pediatrics, received a four-year \$5.5 million grant from NIAID to conduct a chloroquine trial to prevent malaria in pregnancy in Malawi.

FIGURE 25



BARTLEY GRIFFITH, MD, professor, Department of Surgery, and director, Division of Cardiac Surgery, Heart and Lung Transplantation, received a four-year \$5.4 million grant from the National Heart Lung and Blood Institute (NHLBI) for his Pumps for Kids, Infants and Neonates (PumpKIN) study.

FIGURE 26



STEFANIE VOGEL, PhD, professor, Department of Microbiology & Immunology, received a five-year \$3.7 million grant from NIAID to study microphage activation.

FIGURE 27



CHRISTOPHER PLOWE, MD, MPH, professor, Howard Hughes Investigator, and Doris Duke Distinguished Clinical Scientist, Department of Medicine, received a four-year \$3.2 million grant from NIAID for his study on genetic diversity and protective immunity to malaria infection and disease.

Largest Grants, Contracts and Awards from other Agencies



FIGURE 28

ROBERT REDFIELD, MD, associate director, Institute of Human Virology, and professor, Department of Medicine, received a five-year \$8.1 million President's Emergency Plan for AIDS Relief (PEPFAR) award for pre-service and in-service HIV training in the Republic of Kenya.

FIGURE 29



MYRON LEVINE, MD, DTPH, Simon and Bessie Grollman Distinguished Professor, Department of Medicine, and director, Center for Vaccine Development, received a four-year \$10.5 million grant from the Bill & Melinda Gates Foundation for his work on a vaccine to prevent influenza in infants and mothers in Mali, West Africa.

FIGURE 30



ZIV HASKAL, MD, professor, Department of Diagnostic Radiology & Nuclear Medicine, received a four-year \$5 million award from the NHLBI for his study on pharmacomechanical catheter-directed thrombolysis for acute DVT.

FIGURE 31



RICARDO FELDMAN, PhD, associate professor, Department of Microbiology & Immunology, received a five-year \$1.8 million award from the Maryland Stem Cell Research Fund for his work on a generation of patient-specific iPS cells.

Awardees with three or more NIH Ro1 Grants

FIGURE 32



ALAN FADEN, MD, David S. Brown Professor in Trauma, Department of Anesthesiology, and director, Center for Shock, Trauma & Anesthesiology Research (STAR), has received five NIH Ro1 grants totaling \$1.8 million

per year.

FIGURE 33



JOSEPH LAKOWICZ, PhD, professor, Department of Biochemistry & Molecular Biology, has received four Ro1 grants totaling \$1.6 million per year.

FIGURE 34



IRIS LINDBERG, PhD, professor, Department of Anatomy & Neurobiology, has received four Ro1 grants totaling \$1.3 million per year.



Christopher Plowe, MD, MPH
Professor & Howard Hughes Investigator



FIGURE 35



TONI ANTALIS, PhD, professor, Department of Physiology, has received **three NIH R01 grants totaling \$1 million per year.**

FIGURE 36



PAUL WELLING, PhD, professor, Department of Physiology, has received **three R01 grants totaling \$1.2 million per year.**

FIGURE 37



JAMES KAPER, PhD, professor and chair, Department of Microbiology & Immunology, has received **three R01 grants totaling \$1.3 million per year.**

FIGURE 38



MAUREEN BLACK, PhD, John A. Scholl, MD and Mary Louise Scholl, MD Professor, Department of Pediatrics, has received **three R01 grants totaling \$1.6 million per year.**

NIH Research Cooperative Agreements

FIGURE 39



MICHAEL TERRIN, MD, CM, MPH, professor, Department of Epidemiology & Public Health, received a **\$2.4 million grant from the NHLBI for a progenitor cell biology consortium administrative coordinating center.**

FIGURE 40



JACQUES RAVEL, PhD, associate professor, Department of Microbiology & Immunology, and Institute for Genome Sciences, received **\$1.3 million for a study of ecopathogenomics of Chlamydial reproductive tract infections.**

FIGURE 41



WILLIAM STANLEY, PhD, professor, Department of Medicine, was **co-PI with Dr. Mandeep Mehra on a \$1.3 million grant from NHLBI for their study of docosahexaenoic acid for treatment of heart failure.**

FIGURE 42



MANDEEP MEHRA, MBBS, the Dr. Herbert Berger Professor in Medicine, and head, Division of Cardiology, was **co-PI with Dr. William Stanley on a \$1.3 million grant from NHLBI for their study of docosahexaenoic acid for treatment of heart failure.**

Young Investigators with their First NIH R01 Awards

FIGURE 43



XIANG CAI, PhD, assistant professor, Department of Physiology, was **co-PI on a five-year \$1.9 million grant from the National Institute of Mental Health (NIMH) for a study on stress, depression, serotonin and plasticity of excitatory transmission.**

FIGURE 44



SCOTT THOMPSON, professor, Department of Physiology, was **co-PI on the same five-year \$1.9 million grant from the NIMH for a study on stress, depression, serotonin and plasticity of excitatory transmission.**

FIGURE 45



MAN CHARURAT, PhD, associate professor, Department of Medicine, received a **four-year \$3.2 million award from the NIAID to study acute HIV infection and pregnancy.**

FIGURE 46



ALFREDO GARZINO-DEMO, PhD, associate professor, Institute of Human Virology and Department of Microbiology & Immunology, received a **five-year \$1.7 million award from the National Institute**

of Neurological Disorders and Stroke for his work on a novel anti-HIV activity of CCR6 via APOBEC3G: relevance to CNS infection.

FIGURE 47



TODD GOULD, MD, assistant professor, Department of Psychiatry, received a five-year \$1.9 million award from the NIMH for his study on suicide endophenotypes and molecular mechanisms of lithium action.

FIGURE 48



RICHARD M. LOVERING, PhD, PT, assistant professor, Department of Physiology, received a five-year \$1.5 million award from the National Institute of Arthritis and Musculoskeletal and Skin Diseases for a study on mechanisms of force loss in injured and dystrophic skeletal muscle.

FIGURE 49



VLADIMIR TOSHCHAKOV, PhD, assistant professor, Department of Microbiology & Immunology, received a five-year \$1.9 million award from the NIAID on his study deciphering the architecture of TLR signaling complexes.

FIGURE 50



MATTHEW TRUDEAU, PhD, assistant professor, Department of Physiology, received a two-year \$750,000 award from the NHLBI for a study on molecular physiology of HERG (KCNH2) potassium channels.

FIGURE 51



WAYNE WANG, PhD, assistant professor, Department of Medicine, received a five-year \$1.9 million award from the NHLBI for his work on novel mechanisms of smooth muscle beta2-receptor regulation relevant to asthma.

FIGURE 52



PEIXIN YANG, PhD, assistant professor, Department of Obstetrics, Gynecology & Reproductive Sciences, received a five-year \$1.5 million award from the NIDDK for a study on the apoptotic mechanism of maternal diabetes-induced neural tube defects.

FIGURE 53



BYONG YONG, PhD, associate professor, Department of Radiation Oncology, received a four-year \$1.4 million award from the National Cancer Institute for a study on radiotherapy with dose-rate regulated tracking.

FIGURE 54



AIPING ZHAO, MD, assistant professor, Department of Medicine, received a five-year \$1.5 million award from the NIDDK for a study on novel cytokine regulation of gut function and inflammation.

145 Successful ARRA Awards — \$60 million over two years

FIGURE 55
AMERICAN RECOVERY & REINVESTMENT ACT (ARRA) AWARDEES

AWARDEES	AGENCY	\$ AMOUNT
• Alan Faden, MD	NICHD	\$971,000
• Anne Hamburger, PhD	NCI	\$930,000
• Joseph Lakowicz, PhD	NIGMS	\$860,000
• Paul Welling, MD	NIDDK	\$999,000
• Maria Baer, MD	NCI	\$774,000
• Claudia Baquet, MD	CMHD	\$2.4 million
• Claudia Baquet, MD & Shiraz Mishra, MBBS	NCMHD	\$2.5 million
• Robert Gallo, MD	NCI	\$937,000
• Maria Salvato, PhD	NCI	\$985,000
• W. Florian Fricke, PhD	NHGRI	\$1.4 million
• Claire Fraser-Liggett, PhD	NINR	\$2.2 million
• Kevin Cullen, MD & Curt Civin, MD	NCI	\$1.5 million
• William Carpenter, MD	NCRR	\$2.8 million
• David Weber, PhD	NCRR	\$474,000
• Joseph Lakowicz, PhD	NCRR	\$474,000
• Owen White, PhD	NSF	\$1.9 million
• Alan Tomkinson, PhD & Rob Cook, MBA	NCRR	\$5 million
• Nicholas Ambulos, PhD & Rob Cook, MBA	NCRR	\$7.3 million

Research Rankings

As I have said before, funding is a surrogate for program excellence because funding is secured competitively. There are several ranking methodologies that use either subjective or objective criteria. We prefer objective ranking because it is certainly fairer, and we have more control over the results. **The Association of American Medical Colleges (AAMC) ranks medical schools annually based on their total grants and contracts expenditures. Last year, we ranked 6th among the 76 public medical schools nationwide, which puts us in the top 10 of public medical schools based on 2009 data FIGURE 56. Among all 133 public and private medical schools we were 18th — in the top 20 FIGURE 57.** So we are admittedly in a very respectable position among our public and private sister medical schools. Thus, clearly in the top-tier.

The AAMC has developed some new research metrics for the purpose of measuring research growth over time. Using a three-year annualized growth rate (velocity), they determined the growth of sponsored program (research) expenditures at all 133 medical schools across the country. They assigned a code number to each school. **I am very pleased to report that the University of Maryland School of Medicine is the fourth fastest growing research enterprise in America FIGURE 58.**

The AAMC also examined sponsored programs (research) direct expenditures per principal investigator, and the results of this new metric are equally impressive. This metric essentially assesses the research productivity of faculty engaged in research. **On average nationally, faculty expenditures on research (reflecting grant dollars secured per investigator) is about \$287,000 annually. Our faculty expenditure on**

research (or extramural funding) per investigator is about \$475,000, which makes us the seventh most productive school in America FIGURE 59. This is extremely good news. I want to congratulate our faculty, staff and trainees for their impressive research productivity and their commitment to excellence and scholarship.

FIGURE 57

PUBLIC & PRIVATE SCHOOL Rankings*

2009 Total Grants and Contracts Direct Expenditures Public and Private Schools, All Regions

RANK/SCHOOL	GRANTS & CONTRACTS
1 / Harvard	\$1,651,992,093
2 / U WASH	\$682,708,961
3 / UCSF	\$682,595,385
4 / Columbia	\$515,344,575
5 / Duke	\$510,025,598
6 / Johns Hopkins	\$499,071,365
7 / UCLA-Geffen	\$498,481,884
8 / Pennsylvania	\$474,348,732
9 / Mount Sinai	\$437,651,516
10 / Pittsburgh	\$399,902,425
11 / Yale	\$379,229,367
12 / Washington U St Louis	\$377,020,955
13 / Colorado	\$336,243,486
14 / UCSD	\$325,716,360
15 / Stanford	\$318,556,516
16 / Case Western	\$311,234,397
17 / Baylor	\$308,806,789
18 / Maryland	\$307,815,795
19 / Michigan	\$284,333,565
20 / Vanderbilt	\$279,976,122

*Association of American Medical Colleges (AAMC)

FIGURE 56

PUBLIC SCHOOL Rankings*

2009 Total Grants and Contracts Direct Expenditures Public Schools, All Regions

AAMC RANK/SCHOOL	GRANTS & CONTRACTS
1 / UWASH	\$682,708,961
2 / UCSF	\$682,595,385
3 / UCLA-Geffen	\$498,481,884
4 / Colorado	\$336,243,486
5 / UCSD	\$325,716,360
6 / Maryland	\$307,815,795
7 / Michigan	\$284,333,565
8 / North Carolina	\$256,217,664
9 / UT Southwestern	\$234,134,832
10 / Alabama	\$228,534,233

*AAMC

University of Maryland's

National Rank: 6th out of

76 public medical schools

FIGURE 58

GROWTH OF RESEARCH PROGRAM EXPENDITURES All Sponsors

1
5

Fiscal Year 2009

Purpose: Measures Growth Over Time, Higher Number is Favorable

Formula: Three-year Annualized Growth Rate

2010 State of the
School Address

Working Together

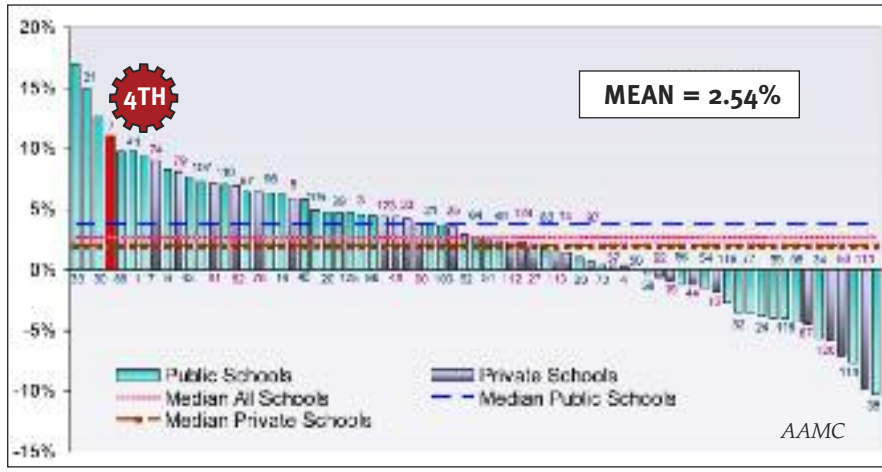


FIGURE 59

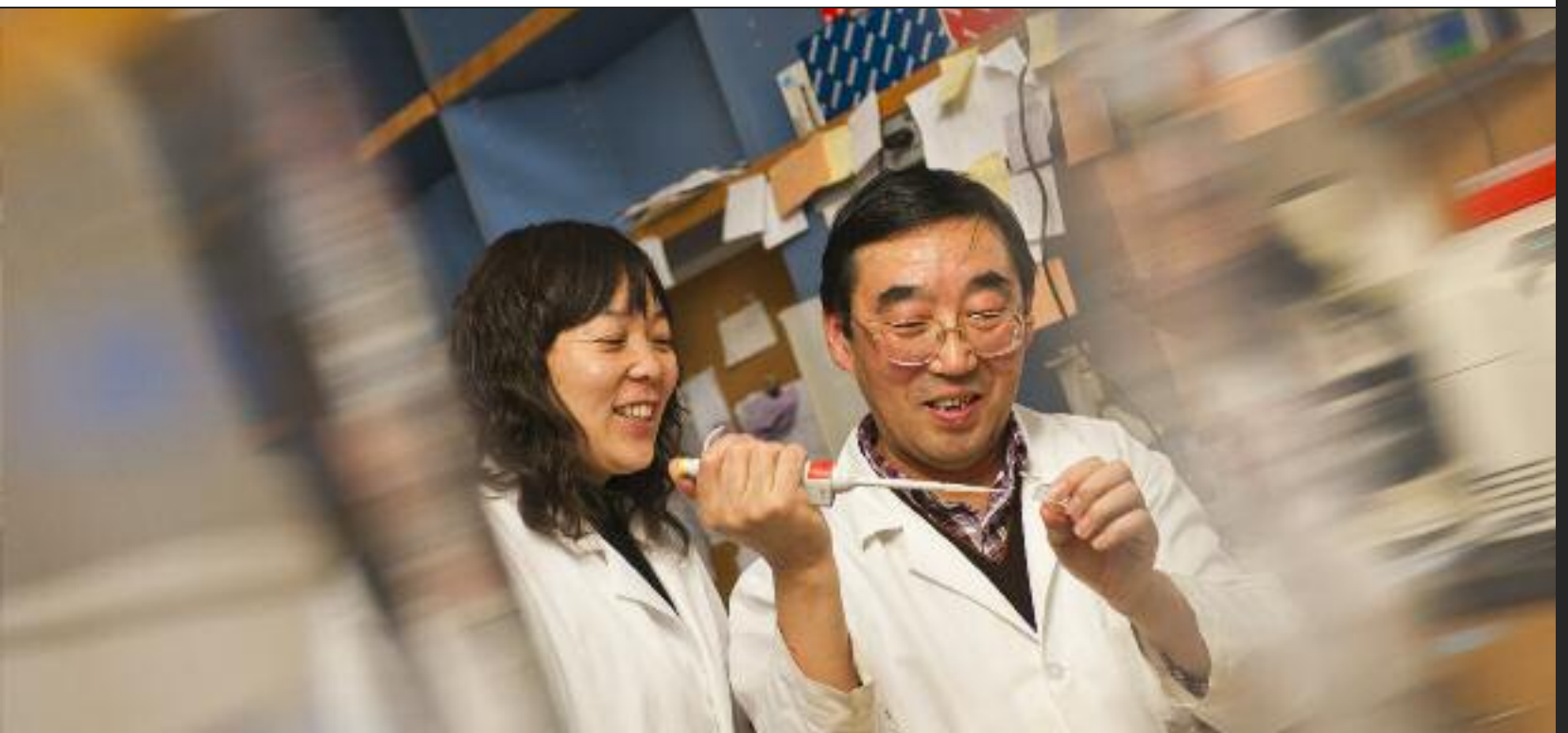
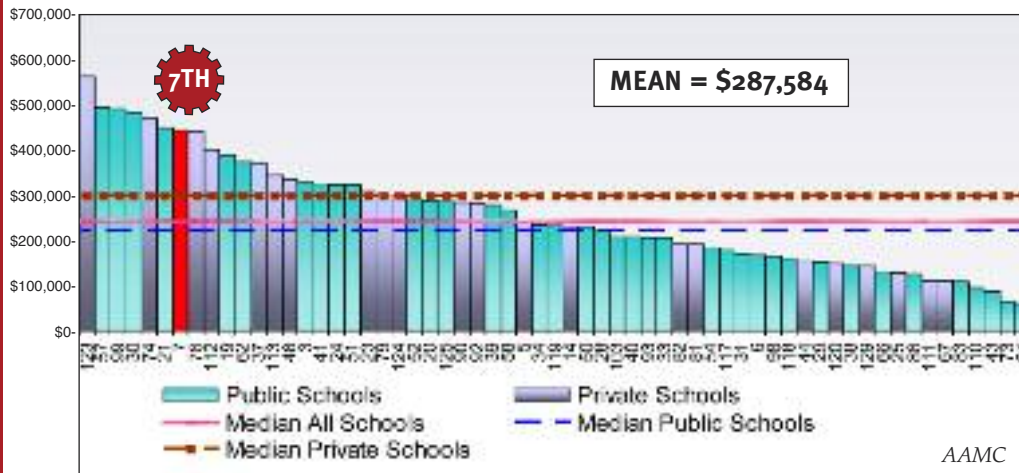
RESEARCH PROGRAMS' DIRECT EXPENDITURES Per Principal Investigator

Fiscal Year 2009

Purpose: Assesses Research Productivity of Faculty Engaged in Research, Higher

Number is Favorable, Formula: Sponsored Programs Direct Expenditures

#PI's Associated With Sponsored Programs Expenditures



Clinical Care



This was a very good year for our clinical mission in many important respects. Our total patient volume rose by four percent to nearly 1.1 million in- and out-patient visits. Admissions to the Medical Center and Shock Trauma Center rose by five percent to 38,332 visits, and in-patient surgeries at the medical center rose by four percent to over 14,000 **FIGURE 60**. Practice plan performance was also excellent, with days in accounts receivable at a quite respectable 51 days. Accounts over 90 days decreased by two percent to a very good rate of 23 percent, and our initial denial rate for invoices continues to be quite low at 6.7 percent **FIGURE 61**.

I have said many times that funding is the fuel that drives our research engine. Likewise, clinical revenue is the fuel that drives our clinical operation. Our clinical revenues continue to increase, but this year by only a modest 1.3 percent **FIGURE 62**. Our volumes increased by four to five percent, but revenues increased by only one percent due to another challenge we had to face during the economic crisis: an increase in Medicaid patients and a decrease in Medicaid reimbursements. This underscores the importance of and necessity for efficiency in practice plan collections.

We introduced several new outpatient initiatives in the last year. In an effort to establish more multi-disciplinary practices, we launched a multi-specialty adult and pediatric practice at Upper Chesapeake Medical Center in Bel Air. Texas Station in Timonium, which has been an efficient and effective or-

thopaedic site for many years, will be transitioned into a multi-specialty practice, with new services in ENT, dermatology, pain management and other surgical specialties. In addition, we now have two general pediatric practices — one at Baltimore-Washington Medical Center and one at University Specialty Hospital, which is near the Inner Harbor and named PATH, Pediatrics at the Harbor. We also opened an immediate care center for faculty, staff and students on the university and hospital campus to receive same-day non-emergency health care services from faculty of the Department of Family and Community Medicine. The Immediate Care Center has a two-fold mission: to provide campus employees and students with quick, convenient care with short waiting times, and to keep referrals among School of Medicine faculty rather than outside specialists.

FIGURE 60

PATIENT CARE Statistics

Practice Plan Performance	2009	2010	Change
Total Patient Volumes (Includes office and inpatient/outpatient visits)	1,053,359	1,092,623	↑ 4%
Admissions (UMMC only; includes newborns and trauma)	36,447	38,332	↑ 5%
Inpatient Surgeries (UMMC only; includes trauma)	13,497	14,035	↑ 4%

FIGURE 61

KEY INDICATORS FOR Billing & Collections

Practice Plan Performance	FY09	FY10	Change
Days in Accounts Receivable	48	51	↑ 3 days
Accounts Receivable > 90 DAYS	25.3%	23.1%	↓ 2.2%
Initial Denial Rate	7.5%	6.7%	↓ 0.8%

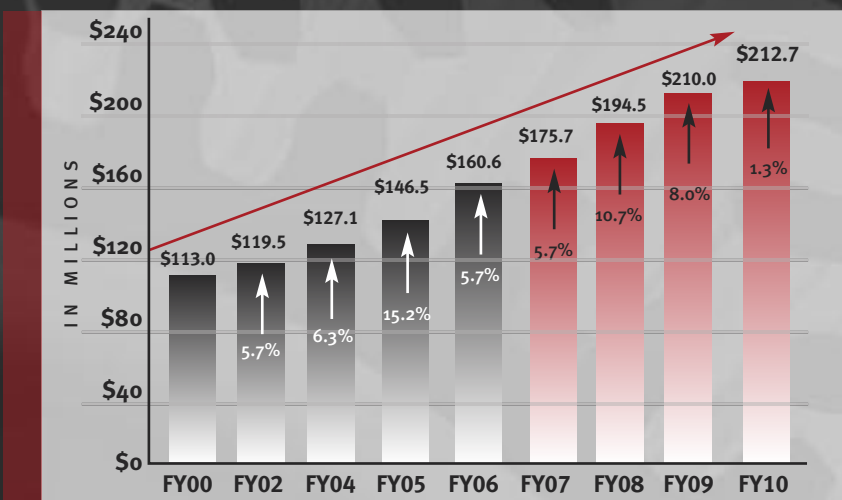
Excellent Practice Plan Performance



14,000 IN-PATIENT SURGERIES

FIGURE 62

TOTAL CLINICAL Revenue FY2000-2010



Increased Medicaid volume but reduced Medicaid reimbursement

Clinical HIGHLIGHTS

SELECTED TOP CLINICAL ACCOMPLISHMENTS IN 2010

This section features selected examples of the groundbreaking and often life saving work of our clinical faculty. In collaboration with the University of Maryland Medical Center, our physician-scientists are pioneering new surgical techniques and technologies, while providing compassionate patient-centered care. These clinical care team members proved that Working Together can restore hope, save lives and find new cures.

Life Saving Heart Transplant Performed in the Midst of Epic Blizzard

There was well over two feet of snow on the ground on February 11, 2010, but that did not stop the University of Maryland Heart Transplantation team from giving 51-year-old Michael Yater a new heart. Knowing that a heart would soon be available, the team spent the night at the University of Maryland Medical Center or nearby hotels. Meanwhile, family and friends dug out Yater's car, and a convoy of plows cleared the roads leading to the hospital. Waiting for Yater was his cardiologist, Dr. Erika Feller, assistant professor of medicine and director of the heart transplantation program, Dr. Bartley P. Griffith, professor of surgery and chief of cardiac surgery, who performed the heart transplant, and anesthesiologist Dr. Ileana Gheorghiu. The transplant team also included nurses, coordinators and operating room staff.

Despite the logistical challenges presented by the storm, the surgery was a complete success. "The doctors here have been fantastic," said Yater. "Dr. Griffith made me feel that everything was under control, even though the weather was out of control."



BARTLEY P. GRIFFITH, MD, professor, Department of Surgery, and chief of Cardiac Surgery, Heart and Lung Transplantation



ERIKA D. FELLER, MD, assistant professor, Department of Medicine, and medical director, Heart Transplantation



ILEANA GEORGHIU, MD, assistant professor, Department of Anesthesiology

Vascular Surgery Restores Hope for Ohio Man

When Don Musick received a kidney transplant in 1999, he did not expect to be back on dialysis a decade later. But the Ohio man developed an abdominal aortic aneurysm, restricting blood flow to his transplanted kidney. His Ohio hospital told him nothing more could be done and to prepare for a lifetime of dialysis. Luckily, Musick decided to seek a second opinion from Dr. Rajabrata Sarkar, the Barbara Baur Dunlap Professor in Surgery, head of the Division of Vascular Surgery, and chief of vascular surgery at the University of Maryland Medical Center. **Dr. Sarkar restored blood flow to Musick's lower body by performing an aortobifemoral bypass and Dr. Andrew Kramer performed a bilateral nephrectomy to remove the patient's enlarged native kidneys.** "Miraculously, the transplanted kidney woke up and started working again in the operating room," said Dr. Sarkar.



RAJABRATA SARKAR, MD, PHD, the Barbara Baur Dunlap Professor in Surgery, head of the Division of Vascular Surgery, and chief of Vascular Surgery



ANDREW KRAMER MD, assistant professor, Department of Surgery, Division of Urology

Surgeons Perform Four-Way Kidney Transplant Surgery on Patients from Four States

In November 2009, University of Maryland transplant surgeons successfully completed a four-way kidney exchange involving eight patients from four states. Among the recipients were a 10-year-old Maryland boy and a 74-year-old Virginia man. Kidney exchanges allow living donors and their intended

recipients to proceed with surgery, even if their blood and tissue types don't match. They are paired with other donors and recipients who are incompatible with each other but are a match with others in the group.

Two of the transplants were performed by Dr. Stephen T. Bartlett, professor and chairman of surgery and surgeon-in-chief at the University of Maryland Medical Center. "This large living donor kidney exchange required extensive planning and coordination," said Dr. Bartlett "This is yet another significant advance that will benefit patients from Maryland and throughout the country."

The 90 member transplant team also included Dr. Matthew Cooper, professor of surgery and director of kidney transplantation and Dr. Rolf Barth, assistant professor of surgery. A key member of the donor evaluation team was nephrologist Dr. Joseph Nogueira, assistant professor of medicine. "Four people who otherwise would not have had matching donors now have lifesaving kidneys." said Dr. Cooper.



STEPHEN T. BARTLETT, MD, professor and chair, Department of Surgery, surgeon-in-chief at the University of Maryland Medical Center



MATTHEW COOPER, MD, professor, Department of Surgery, director of kidney transplantation and clinical research, Division of Transplantation



ROLF BARTH, MD, assistant professor, Department of Surgery



JOSEPH NOGUEIRA, MD, assistant professor, Department of Medicine

RapidArc Therapy Improves Quality of Life for Cancer Patients

Traditional radiation therapy may require a cancer patient to lie motionless for 30 minutes or more. It can be a difficult experience. But at the University of Maryland Marlene and Stewart Greenebaum Cancer Center, **treatment times are being dramatically reduced with RapidArc technology.** During treatment, the machine rotates 360 degrees around the patient. "RapidArc radiation

therapy delivers radiation precisely where it is needed and is up to ten times faster than the conventional approach," says Mohan Suntha, MD, vice chair of Radiation Oncology and the Marlene and Stewart Greenebaum Endowed Professor in Radiation Oncology at the School of Medicine.

RapidArc technology was originally invented by Cedric X. Yu, DSc, the Carl M. Mansfield Endowed Professor in Radiation Oncology at the School of Medicine, and member of the radiologic physics team at the Greenebaum Cancer Center.



CEDRIC X. YU, DSc, the Carl M. Mansfield Endowed Professor in Radiation Oncology



MOHAN SUNTHA, MD, vice chair of Radiation Oncology and the Marlene and Stewart Greenebaum Endowed Professor in Radiation Oncology

New Cryotherapy Technique to Treat Cancer of the Esophagus

Doctors at the University of Maryland Medical Center are using a new cryotherapy technique to treat cancerous and pre-cancerous conditions of the esophagus. The medical center is one of only a handful of facilities in the world to offer endoscopic spray cryotherapy and one of three centers conducting clinical research to determine its effectiveness. Doctors spray liquid nitrogen onto abnormal or cancerous tissue. **The liquid nitrogen freezes the tissue, which then thaws and ultimately sloughs off, allowing normal tissue to grow back in its place.**

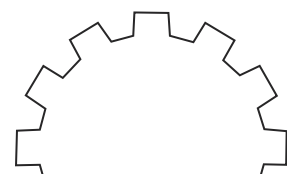
Dr. Bruce D. Greenwald, associate professor of medicine and gastroenterologist is leading this pilot study. He has treated 22 patients since April 2006. "The early results are very promising. The patients diagnosed with early-stage cancer are responding well," says Dr. Greenwald. All this would not be possible without the physicians and staff in the Thoracic Oncology Program, and the help of Dr. William Twaddell, assistant professor of pathology.



BRUCE D. GREENWALD, MD, professor, Department of Medicine



WILLIAM TWADDELL, MD, assistant professor, Department of Pathology



Organizational Partnership and Recognition

The Power of Partnership continues each year.



The School of Medicine's partnership with the University of Maryland Medical Center and Medical System is stronger than ever. This is evident by the recognition our clinical faculty and the medical center received this past year. I extend my hearty congratulations to all clinical faculty, staff and hospital leadership who received public recognition for their hard work and commitment to excellence.

- *US News & World Report* annual "Best Hospitals" survey listed nine of our clinical programs among the "best of the best:" **Cancer; Diabetes & Endocrinology; Ear, Nose & Throat; Geriatrics; Heart & Heart Surgery; Kidney Disorders; Orthopaedics; Pulmonology; and Urology.** The University of Maryland Medical Center was also ranked among the top 50 best hospitals, out of 4,852 total hospitals.
- For the fourth consecutive year, the University of Maryland Medical Center received the **Leapfrog Award** for Patient Safety and Quality Care, and is the only so-designated hospital in Maryland.
- The University of Maryland Medical Center again achieved **Magnet Status**, which is awarded by the American Nurses Credentialing Center to hospitals that meet specific criteria for nursing excellence.
- The U.S. Department of Health and Human Services awarded the **Medal of Honor for Organ Donation** to the University of Maryland Medical Center.
- The blood and marrow transplant team at the University of Maryland Marlene and Stewart Greenebaum Cancer Center won first place for **Best Nursing Team from ADVANCE for Nurses magazine.**
- The University of Maryland Medical Center's Progressive Care Unit received the prestigious **Beacon Award from the American Association of Critical-Care Nurses.** This award recognizes the top intensive care units in the country.
- The American Heart Association recognized the University of Maryland Medical Center with the **Gold Level Award as a Fit-Friendly Company.**
- The University of Maryland Breast Center has been designated as a **Breast Imaging Center of Excellence** by the American College of Radiology.



SOM BOARD OF VISITORS

Thanks to our Board of Visitors — together we are building strong partnerships at the School of Medicine and in the community.

Michael E. Cryor, *Chair*

Peter G. Angelos, Esq.

Kenneth Banks

Morton D. Bogdonoff, MD

Jocelyn Cheryl Bramble

Frank C. Carlucci, III

William M. Davidow, Jr., Esq.

Robert C. Embry, Jr.

Robert E. Fischell, ScD

Ronald E. Geesey

Stewart J. Greenebaum

Willard Hackerman

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Harry C. Knipp, MD, FACR

Patrick McCuan

Carolyn McGuire-Frenkil

Edward Magruder Passano, Jr.

Timothy J. Regan

Melvin Sharoky, MD

Richard L. Taylor, MD, FAAN

Ex-Officio

E. Albert Reece, MD, PhD, MBA

Otha Myles, MD

Martin I. Passen, MD

Community Service



The School of Medicine has a long and proud history of providing service and outreach to those in need. This year we celebrated a decade of service to the community with our 10th annual Mini-Med School program in Baltimore. We take great pride in the fact that we have Mini-Med programs across the state and that we have provided nearly 5,000 Marylanders with up-to-date health and wellness education since 2001 **FIGURE 63**. Lt. Governor Anthony Brown was our special guest at graduation and he presented me with a proclamation from the governor commending us on our 10th anniversary celebration of Mini-Med School and honoring the “impressive contributions of the state’s public academic medical institution” **FIGURE 64**.

The outcome of which I am perhaps most proud is that Mini-Med School also fosters mentoring. Our graduation keynote speaker was Yusuf Ali, a third-year medical student who was a participant in our Mini-Med School program when he was an undergraduate at Morgan State. He is now mentoring one of our Mini-Med for Kids participants, a young man at a local high school, who hopes to become a doctor one day **FIGURE 65**.

School of Medicine students engage in thousands of hours of community outreach and service every year, and one of their most visible efforts is Project Feast. Project Feast, held annually at Booker T. Washington Elementary School, which is not far from campus, is a very special event providing Thanksgiving dinner to the homeless **FIGURE 66**. While it organized by our medical students each year, it is a collaborative effort involving students from all of the other six UM graduate schools.

Our community engagement reach extends far beyond the boundaries of Maryland. Following the two

earthquakes in Haiti last January, we very quickly launched an effort to send doctors, nurses and allied health professionals to aid the survivors of the disaster **FIGURE 67**. **Over 500 health professionals spent a total of 2,289 aggregate days in Haiti, and developed education programs for Haitian physicians and nurses in infectious disease and orthopaedic trauma and nursing. This is a sustained effort and we will continue providing care as long as we are needed there.**

I do want to give credit to some of the key leaders of this huge undertaking: Dr. Robert Redfield, professor and associate director, Institute of Human Virology, and professor of medicine; Dr. Thomas Scalea, the Francis X. Kelly Professor in Trauma Surgery, Director of the SOM Program in Trauma and physician-in-chief, University of Maryland R Adams Cowley Shock Trauma Center; Dr. Andrew Pollak, associate professor of orthopaedics; Dr. Joe O’Neill, visiting professor of medicine and director, Global Health Initiatives; and Karen Doyle, MBA, MS, RN, vice president, Shock Trauma Center.

FIGURE 63

SOM IS A GOOD NEIGHBOR Mini-Med Summary

Maryland Region	2004	2005	2006	2007	2008	2009	2010
Baltimore	160	165	150	200	300	225	220
Baltimore-Elementary/ Middle	35	40	75	55			
Baltimore-High School		20	105	85	100	75	75
Eastern Shore	100	140	105	105	120	80	80
Western Maryland		180	150	140	154	132	
Montgomery County (in Spanish)		270					
Southern Maryland		15					
Bioethics (statewide)							510
Totals	260	790	510	565	714	587	940

TOTAL NUMBER OF PARTICIPANTS BETWEEN 2001-2010 = **4,716**

FIGURE 64



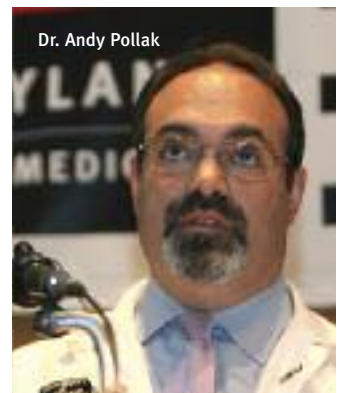
Lt. Governor Anthony Brown presents a proclamation to Dean Reece in honor of the 10th anniversary of Mini-Med School.



FIGURE 67
 Robert Redfield, MD
 Professor & Associate Director
 Institute of Human Virology



Dr. Joe O'Neill



Dr. Andy Pollak



Dr. Thomas Scalea



Karen Doyle, MBA, MS, RN

2,289 DAYS UM DEDICATED TO HAITI

FIGURE 65



Matthew Blackwell (left), 10th grader, Vivien T. Thomas High School, a Mini-Med for Kids participant, and his mentor, Yusuf Ali, Class of '12, a former Mini-Med School participant.

FIGURE 66



SOM students held their 20th annual "Project Feast." Students served up a Happy Thanksgiving to 400 homeless and disadvantaged people in West Baltimore.

Finance & Philanthropy

The School of Medicine's total revenues were \$881.4 million **FIGURE 68**. More than half of our total operating budget (54 percent) is accounted for by grants and contracts. Another large portion of our budget (38 percent) is from clinical activities, with 24 percent from the practice plan fees for service, and 14 percent from contracts with our hospital partners. The remaining income comes from tuition, state appropriations and/or gifts. Even in this troubled economic environment we were gratified to see increases in all categories except one **FIGURE 69**.

The School of Medicine continues to have an extremely positive economic impact on the state of Maryland. **An economic impact of \$1.5 billion is quite impressive in and of itself. When the combined impact of the School of Medicine and the Medical System, the number is truly stunning. Jointly, our economic impact on the state of Maryland is \$5 billion.**

In spite of our impressive economic activity on the state, these are still exceedingly difficult economic times. Thus private gifts become very important to our solvency. Most of the funds in our pie chart are committed dollars — research dollars are

committed to research, clinical dollars are committed typically to personnel compensation, and our private gifts usually are our discretionary funds. In fiscal year 2009 we raised \$54 million — a nearly 10 percent increase over the previous year **FIGURE 70**.

I am extremely pleased to report that this year we saw a 14 percent increase in private gifts for a total of \$61 million — our best year ever. Clearly, our faculty and staff, particularly our development staff under the leadership of associate dean Dennis Narango, deserve an enormous amount of credit in achieving this superlative performance.

FIGURE 68

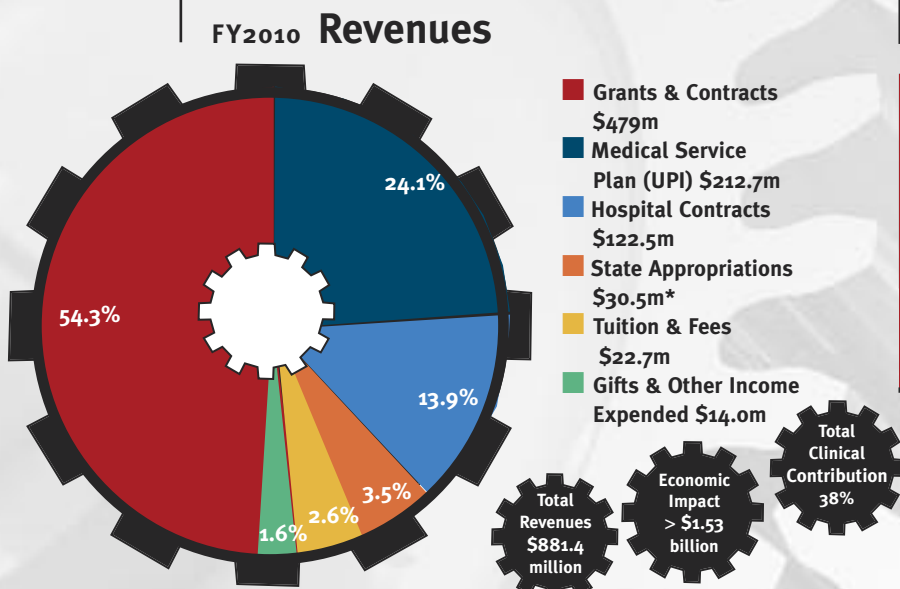


FIGURE 69

REVENUE Millions

	FY09	FY10	Change
Grants & Contracts	\$425.8	\$479.1	↑ 12.5%
Tuition & Fees	\$20.9	\$22.7	↑ 8.6%
Medical Service Plan (UPI)	\$210.0	\$212.7	↑ 1.4%
Gifts & Others (Expended)	\$13.7	\$14.0	↑ 2.2%
Affiliated Hospitals	\$103.1	\$122.5	↑ 18.8%
State Appropriations	\$34.8	\$30.5	↓ 12.4%

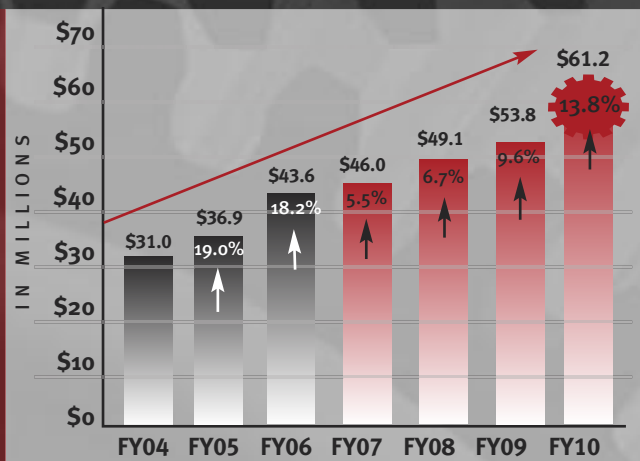
* Includes fringe benefits and Maryland Psychiatric Research Center transfer from contract to state appropriation



\$ 8 8 1 . 4 TOTAL REVENUES

FIGURE 70

Private Gifts BY YEAR



In each of the past several years, the University of Maryland School of Medicine has raised the bar of success for private philanthropy and fiscal year 2010 was no exception. Our income goal of \$60.9 million was very ambitious given the economic climate. I am pleased to report that we achieved and surpassed that goal. From July 1, 2009, through June 30, 2010, the School of Medicine secured private gifts and commitments in excess of \$61.2 million. This figure represents a 13.75 percent increase over the FY09 total.

We had quite a few large gifts last year that helped us exceed our campaign goals. We were extremely fortunate to receive four seven-figure gifts, ranging from \$1.1 million to \$3 million **FIGURE 71**. The largest gift from an individual donor is one of our own faculty members who is a scientist and inventor. Cedric Yu, DSc, clinical professor of radiation oncology, recently invented a technology for treating breast cancer in situ, which he patented and around which he created a company and to which he subsequently sold his interest. This enabled him to make this extraordinary \$3 million gift. I want to thank Dr. Yu, and indeed all of our donors, who made the past year so tremendously successful.

This past year we also had two investiture ceremonies. Stephen Bartlett, MD, became the inaugural Peter Angelos Distinguished Professor in Surgery **FIGURE 72** in March. In October, Raj Sarkar, MD, PhD, became the Barbara Baur Dunlap Professors of Surgery **FIGURE 73**.

Our annual Fund for Medicine Gala, entitled “New Waves in Medicine,” reflected the excitement that occurs at the School of Medicine and across the campus. This past year the gala was chaired by Board of Visitors member John Kelly and his wife Tee. Over 700 guests attended this very special event, and we were gratified to raise **\$377,000** to fund programs, scholarships and unrestricted dean’s initiatives at the School of Medicine **FIGURE 74**.

Over the last year we had some leadership transitions in the finance office. **Gregory Handlir, MBA**, senior associate dean for Finance and Resource Management retired after 40 years at the School of Medicine **FIGURE 75**. Greg will be a tough act to follow, but fortunately Greg built a deep bench, and I have promoted two of his protégés to take his place. **Louisa Peartree, MBA**, who worked as Greg’s assistant dean

for 12 years, has been promoted to associate dean for Finance and Business Affairs and Chief Financial Officer, and will assume full responsibility for the financial resources in the School of Medicine **FIGURE 76**.

Gregory Robinson, DMin, MA, was also an assistant dean working for Greg, and has been promoted to associate dean for Academic Administration and Resource Management, and he will assume the full responsibility for the non-financial resources of the School of Medicine **FIGURE 77**. **Bill Tucker, MBA, CPA**, who is the practice plan’s chief corporate officer, has been appointed assistant dean for Practice Plan Affairs **FIGURE 78**.

FIGURE 72



Stephen Bartlett, MD (left), and Peter Angelos, Esq. at the investiture ceremony for the Inaugural Peter Angelos Distinguished Professorship in Surgery

FIGURE 73



OCTOBER 6, 2009 Rajabrata Sarkar, MD, PhD (left), the Barbara Baur Dunlap Professor of Surgery and Stephen Bartlett, MD

FIGURE 71

FY2010 TOP PHILANTHROPIC Gifts

Donor	Gift Amount	Recipient	Purpose
Cedric Yu, ScD/Yi, Yu and Lerma, LLP	\$3,000,000	Radiation Oncology	Program Support
Orokawa Foundation	\$1,700,000	Radiation Oncology, Otorhinolaryngology, Greenebaum Cancer Center	Program Support
Anonymous	\$1,519,600	Physical Therapy & Rehabilitation Science	Professorship
Anonymous	\$1,146,750	Integrative Medicine	Program Support
King Pharmaceuticals, Inc.	\$721,589	Medicine	Research
Mr. Thomas Hales	\$540,000	Surgery, Medicine	Professorship
Mrs. Alice-Marie Hales			
John W. Kluge Foundation	\$500,000	Integrative Medicine	Program Support
Elizabeth Shamburger	\$350,000	Office of the Dean	Fellowship
Hans and Charlotte Kaiser Charitable Remainder Trust	\$313,063	Radiation Oncology	Professorship
Nicholl Family Foundation, Inc.	\$250,000	Medicine	Research
TOTAL	\$10 Million		

FIGURE 74

“NEW WAVES IN MEDICINE”



Honorary Co-Chairs Mr. and Mrs. John and Tee Kelly



Michael Cryor, Chair, Board of Visitors

FUND FOR MEDICINE GALA • MARCH 27, 2010



Mr. and Mrs. Frank Carlucci Mr. Dennis Narango



Dr. and Mrs. Robert Fischell and Mrs. Stephen Bartlett



700 GUESTS ATTENDED THE GALA; \$377,000 RAISED

FIGURE 75



Gregory Handlir, MBA

FIGURE 76



Louisa Peartree, MBA

FIGURE 77



Gregory Robinson, DMin, MA

FIGURE 78



Bill Tucker, MBA, CPA



Faculty & Leadership HIGHLIGHTS

2010 State of the
School Address

Working Together

This section features a selection of faculty, staff and board members who received leadership appointments, prestigious honors and special recognition over the past year.

FIGURE 79



STEPHEN BARTLETT, MD, Peter Angelos Distinguished Professor in Surgery and chair, Department of Surgery, was appointed surgeon-in-chief of the University of Maryland Medical System, effective July 1, 2010. In this expanded role, he will grow and enhance surgical services throughout the Medical System, recruit surgeons at all system hospitals and strengthen relationships between School of Medicine surgical faculty members and private-practice community surgeons.

to become the assistant dean for Development. He will provide executive level leadership and counsel in the strategic and operational work of the development office.

FIGURE 82



ANDREW DUNSMORE, PHD, was recruited from Johns Hopkins University in October 2009

to become the assistant dean for Development. He will provide executive level leadership and counsel in the strategic and operational work of the development office.

FIGURE 87



JAMES KAPER, PHD, professor and chair, Department of Microbiology & Immunology, was inducted

into the 2010 Carolyn J. Pass, MD '66 & Richard M. Susel, MD '66 Academy of Educational Excellence.

FIGURE 80



STEPHEN LIGGETT, MD, professor, Department of Medicine, was appointed associate dean for Interdisciplinary Research. In this new role, effective November 23, 2009, Dr. Liggett will foster scientific collaboration between faculty members from throughout the institution in order to develop a broad range of interdisciplinary basic science and translational research, which will both broaden institutional basic research and lead to clinical applications for those basic science discoveries. His funding exceeds \$3.5 million.

named 2009 UMB Founders Week Faculty Research Lecturer of the Year.

FIGURE 83



MICHAEL CRYOR, MD, long-time member of the SOM Board of Visitors, was appointed chair, effective January 2010.

FIGURE 84



ALESSIO FASANO, MD, professor, Department of Pediatrics, and director, Mucosal Biology Research Center, was

named 2009 UMB Founders Week Faculty Research Lecturer of the Year.

FIGURE 88



DAVID MALLOTT, MD, associate professor, Department of Psychiatry, and associate dean for Medical Education, was inducted into the 2010 Carolyn J. Pass, MD '66 & Richard M. Susel, MD '66 Academy of Educational Excellence.

in Trauma, was selected by the medical students to address the graduating class at the 2009 convocation ceremony.

FIGURE 89



TOM SCALEA, MD, Francis X. Kelly Professor in Trauma Surgery, Department of Surgery, and director, Program

in Trauma, was selected by the medical students to address the graduating class at the 2009 convocation ceremony.

FIGURE 81



MARGARET MCCARTHY, PHD, professor, Department of Physiology, was promoted in July 2009 to associate dean for Graduate Studies and Post-doctoral Scholars. In this new role, she will be responsible for the Graduate Program in Life Sciences and the post-doctoral research fellowship programs.

received the 2009 Founders Week Entrepreneur of the Year award.

FIGURE 85



MYRON LEVINE, MD, DTPH, Simon and Bessie Grollman Distinguished Professor, Department of

Medicine, and director, Center for Vaccine Development, received the 2009 Founders Week Entrepreneur of the Year award.

FIGURE 90



LARRY ANDERSON, PHD, professor, Department of Anatomy & Neurobiology, was elected by the graduation medical students to receive the Golden Apple Award—Preclinical.

received the 2010 UMB Martin Luther King, Jr., Diversity Recognition Award and the Living Legend award from the Associated Black Charities.

FIGURE 86



ELIJAH SAUNDERS, MD, professor, Department of Medicine, received the 2010 UMB Martin

Luther King, Jr., Diversity Recognition Award and the Living Legend award from the Associated Black Charities.

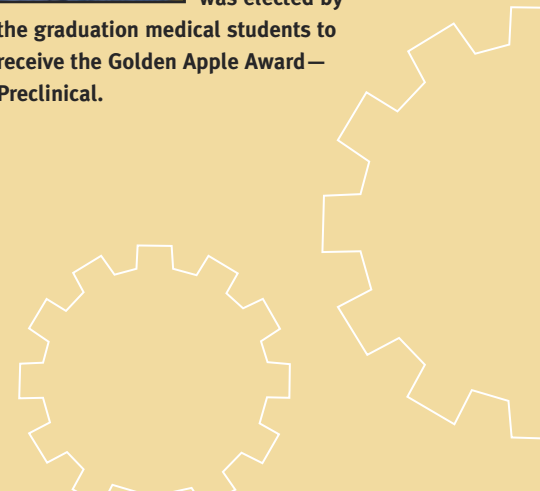


FIGURE 91



DONNA HANES, MD, associate professor, Department of Medicine, was chosen by the graduating medical students to receive the Gold Apple Award—Clinical.

FIGURE 92



ROBERT GALLO, MD, director, Institute of Human Virology, and professor, Department of Medicine, received the

Distinguished Research in the Biomedical Sciences Award from the Association of American Medical Colleges.

FIGURE 93



VINCENT PELLEGRINI, MD, James Lawrence Kernan Professor and Chair, Department of Orthopaedics,

was appointed a member of the Association of American Medical Colleges' Council of Academic Societies Administrative Board and is president of the American Orthopaedic Association.

FIGURE 94



MIRIAM BLITZER, PHD, professor, Department of Pediatrics, and head, Division of Human Genetics,

was appointed to serve a two-year term as president of the Association of Professors of Human and Medical Genetics.

FIGURE 95



EDWARD WEINMAN, MD, professor, Department of Medicine, received the

William S. Middleton Award for outstanding contributions to the understanding of kidney function from the United States Veterans Administration.

FIGURE 96



VIRGINIA KEANE, MD, associate professor, Department of Pediatrics, was named

Pediatrician of the Year by the American Academy of Pediatrics.

In Memoriam

Sadly, a few School of Medicine family members have left us:



FIGURE 97

LARRY ANDERSON, PHD, professor, Department of Anatomy & Neurobiology, died on May 15, 2010, at the age of 62. Dr. Anderson taught anatomy to first year medical students for over 30 years. As course master in Structure and Development, he was the first faculty member students met when they entered medical school, becoming not only an educator and mentor, but a friend and father figure as well. Dr. Anderson was a multi-year winner of Teacher of the Year and Preclinical Golden Apple awards. A scholarship fund in Dr. Anderson's name was established to support student scholarships.



FIGURE 98

ILEY "TRIP" BROWNING, MD, associate professor, Department of Pediatrics, died on March 11, 2010, at the age of 54. Dr. Browning was head of the Division of Pediatric Pulmonology and Allergy. His clinical and research interests were in cardiovascular function, exercise physiology and treatments, and chronic lung disease and lung transplants in patients with resistant organisms.



FIGURE 99

BRIAN EMERY, MD, assistant professor, Department of Otolaryngology-Head and Neck Surgery, died on September 10, 2009, at the age of 49. Dr. Emery was board certified in otolaryngology and facial plastic and reconstructive surgery, with an interest in snoring and sleep apnea surgery.



FIGURE 100

NATHAN SCHNAPER, MD, professor emeritus, Department of Psychiatry, died on August 23, 2010, at the age of 94. Dr. Schnaper was the School of Medicine's longest living faculty member. He had been chief of psychosocial services at the University of Maryland Marlene and Stewart Greenebaum Cancer Center for 22 years, and continued to see patients up until the time of his death.

Media Coverage



The successes shared on these pages — and many other achievements — have resulted in tremendous national and international media coverage. Last year the total number of television placements increased by 44 percent FIGURE 101. The number of podcast downloads increased by 54 percent. However, because the media industry continues to struggle and has reorganized to include fewer science and medicine reporters and editors, our placements in other areas decreased last year. In spite of this, we still garnered an enormous amount of coverage, due to the hard work and tremendous discoveries of our faculty, and I am always pleased when they are recognized publicly for their efforts.

Each year we feature the top two news stories that received the most media coverage. The number two top news story in the last year featured **Alessio Fasano, MD**, professor, Department of Pediatrics, and director, Mucosal Biology Research Center FIGURE 102, and **Curt Civin, MD**, professor, Department of Pediatrics, associate dean for Research, and director, Center for Stem Cell Biology and Regenerative Medicine FIGURE 103. **Drs. Fasano and Civin are leading a new international research initiative, funded in part by the Vatican, to explore the therapeutic potential of intestinal stem cells.** The April announcement led to stories in more than 400 media outlets world-wide, including ABC News, USA Today, the Associated Press and the BBC in London.

The number one top news story featured the work of **Karen Kotloff, MD**, professor, Department of Pediatrics FIGURE 104, and **Wilbur Chen, MD**, assistant professor, Department of Medicine FIGURE 105, who led one of the nation's first studies of an

experimental vaccine designed to prevent the 2009 H1N1 influenza virus. This story appeared in over 700 news outlets world-wide, including Good Morning America, ABC News' Nightline, CNN, National Geographic Television, the BBC and Al Jazeera.

FIGURE 101

Media COVERAGE*

	2009	2010	Change
Television Placements	8,064	11,628	↑ 44%
Podcast Downloads	525,279	810,000	↑ 54%
Story Placements	26,285	24,943	↓ 5%
National Stories	23,799	22,773	↓ 4%
Internet Placements	4,992	4,839	↓ 3%
Print/Wire Placements	10,597	5,313	↓ 49%

* Because the media industry is struggling and reorganizing, numbers of traditional story placements are down. We are adjusting our strategy accordingly, boosting numbers of television placements and podcasts.

FIGURE 102



Alessio Fasano, MD

FIGURE 103



Curt Civin, MD

FIGURE 104



Karen Kotloff, MD

FIGURE 105



Wilbur Chen, MD



H1N1 VACCINE HELPED KIDS AND ADULTS NATIONWIDE



Conclusion

2010 State of the
School Address

Working Together

As I look ahead, I see a bright future awaiting us.

Clearly we will have to overcome challenges, some of which we have no control over, such as the economy. We will have to work harder than ever to capitalize on our recent successes. We will use our new strategic plan to guide us as we work together to bring out the best in the institution and in each other.

SELECTED 2011 PRIORITIES:

- Implement our ambitious **2011-2016 strategic plan, “Taking a Quantum Leap Forward”**
- Secure state legislative budget **approval for Health Sciences Facility III** (new research building)
- Advance our \$500 million development campaign, particularly to **secure funds for scholarships and endowed professorships**
- **Expand medical education programs** and advance research education at all levels
- **Expand our research enterprise** into the I-270 biotechnology corridor
- Explore **new global opportunities** for clinical and research programs

I am extremely grateful for all the successes the school has had this past year.

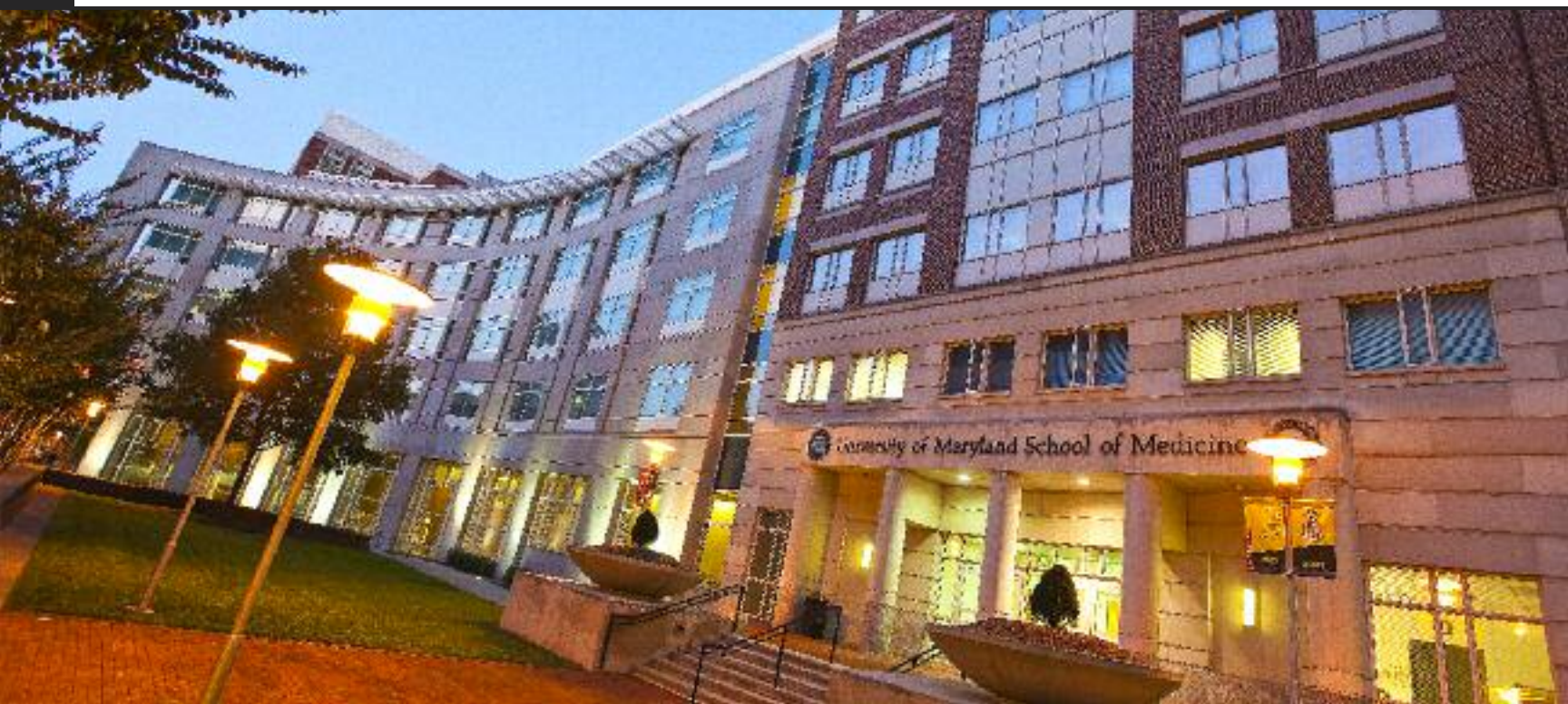
Decades of hard work by dedicated faculty and staff and supporters have brought us to this point, and have, in fact, placed **the University of Maryland School of Medicine among the top tier of medical schools in the nation and, indeed, in the world.** We will continue to be successful if we continue to work together harmoniously and creatively. I believe that institutions that embrace innovation and creative approaches through team work and collaboration will thrive in the years to come. **I also believe that by working together we will continue to bring out the best in ourselves and in each other.**

In the relentless pursuit of excellence, I am
Sincerely,

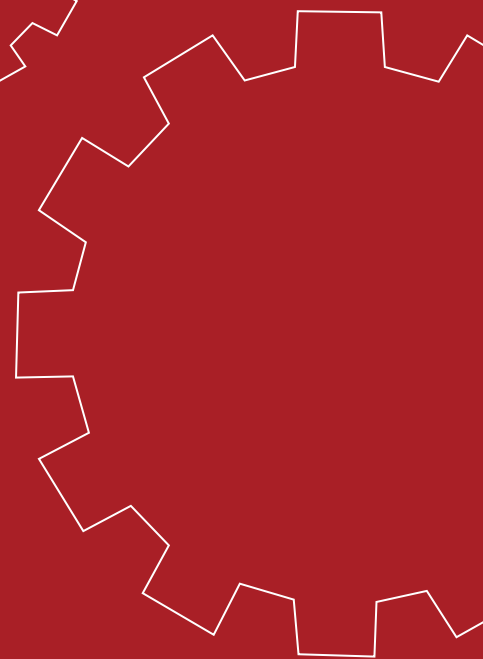
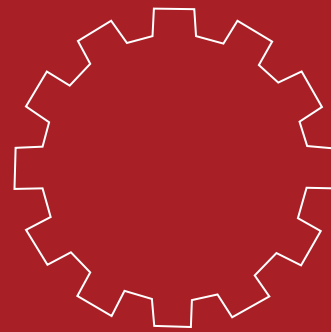
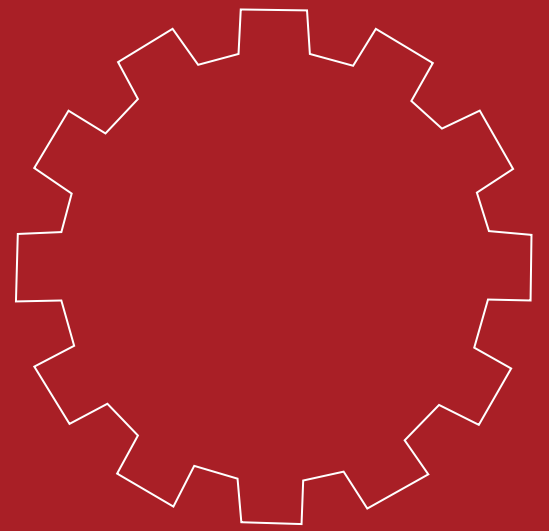


E. Albert Reece, MD, PhD, MBA

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



“We worked together and brought out the best.”





**University of Maryland
School of Medicine**

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