Report of the Josiah Macy, Jr. Foundation

For July 1, 2002 through June 30, 2003

Josiah Macy, Jr. Foundation 44 East 64th Street New York, NY 10021 www.josiahmacyfoundation.org



Contents

Board of Directors and Staff	4
About the Foundation	7
President's Statement	10
Programs	19
1.Diversity Among Health Professionals	21
A National Health Careers Website	22
The Harold Amos Graduate Student Fellowship Fund	23
Women in Medicine	24
Increasing Diversity Among Health Care Professions	24
Women's Health in Medical Curricula	25
A Grant to Extend Funding for a New York	
Post-Baccalaureate Program	26
Neurology Fellowships for Minority Physicians	27
2. Health Professional Education in the Context of the Changing Health Care System	29
The Macy Initiatives in Health Communication	30
Health Communications Dissemination Phase	31
Training For the Use of Computerized Mannequins	32
A Study of International Medical Graduates	33
A Blueprint for Pediatric Residency	34
Improved Clinical Training for Medical Students	34
A Fourth-Year Medical School Curriculum	36
Alcoholism and Drug Addiction Core Curriculum	37
Fast Track for Academic Nursing	37

3. Increasing Teamwork Between and Among
Multiple Health Professions
Bridging the Gap in Psychotherapy40
A Study of Four State Public Health Departments41
Macy Scholars Program42
An Inter-professional Curriculum
Your Genes/Your Health (YGYH)
4. Educational Strategies to Increase Care for
Underserved Populations
The Future of Emergency Medicine46
A Fund Responsive to 9/11 Issues
Leadership Training for Safety Net Hospitals
5. Macy Conferences
The Future of Pediatric Medicine in the 21st Century50
Proposal for the Next Macy Conference51
Staff Grants Awarded Fiscal Year 2002-2003
Post 9/11 Special Funds 2002 – 200353
Report of Independent Auditors
Guidelines for Grant Applications

Board of Directors and Staff

Board of Directors

Clarence F. Michalis

Chairman of the Board Josiah Macy, Jr. Foundation

Lawrence K. Altman, M.D.

Staff Medical Correspondent "The Doctor's World" Columnist The New York Times

J. Carter Bacot

Retired Chairman and Chief Executive Officer The Bank of New York

Jordan J. Cohen, M.D.

President Association of American Medical Colleges

E. Virgil Conway

Chairman Emeritus Metropolitan Transportation Authority Chairman Rittenhouse Advisors, L.L.C.

John W. Frymover, M.D.

Dean Emeritus, College of Medicine University of Vermont

S. Parker Gilbert

Advisory Director Morgan Stanley

Patricia Albjerg Graham, Ph.D.

Charles Warren Professor of the History of American Education Harvard Graduate School of Education

Bernard W. Harleston, Ph.D.

Senior Associate New England Resource Center for Higher Education University of Massachusetts, Boston

Arthur H. Hayes, Jr., M.D.

President MediScience Associates, Inc.

Lawrence S. Huntington

Chairman Emeritus Fiduciary Trust Company International

John Jay Iselin, Ph.D.

President The Marconi Foundation

Mary Patterson McPherson, Ph.D.

Vice President The Andrew W. Mellon Foundation

June E. Osborn, M.D.

President Josiah Macy, Jr. Foundation

Herbert Pardes, M.D.

President and CEO New York-Presbyterian Hospital

William H. Wright II

Managing Director Morgan Stanley

Honorary Directors

Louis S. Auchincloss

Author

Alexander G. Bearn, M.D.

Executive Officer Emeritus American Philosophical Society

David L. Luke III

Retired Chairman Westvaco Corporation

Executive Committee

Clarence F. Michalis, Chairman

E. Virgil Conway
Patricia Albjerg Graham, Ph.D.
Bernard W. Harleston, Ph.D.
Lawrence S. Huntington
Mary Patterson McPherson, Ph.D.
June E. Osborn, M.D.

Audit Committee

E. Virgil Conway, Chairman

Lawrence S. Huntington John Jay Iselin, Ph.D. William H. Wright II

Finance Committee

Clarence F. Michalis, Chairman

J. Carter Bacot E. Virgil Conway S. Parker Gilbert Lawrence S. Huntington June E. Osborn, M.D. William H. Wright II

Staff

June E. Osborn, M.D.

President

Martha Wolfgang, M.P.H., M.S.W.

Vice President and Treasurer

Ruth Corbett

Executive Assistant

Rina Forlini

Secretary to the Board

Deloris DeBerry

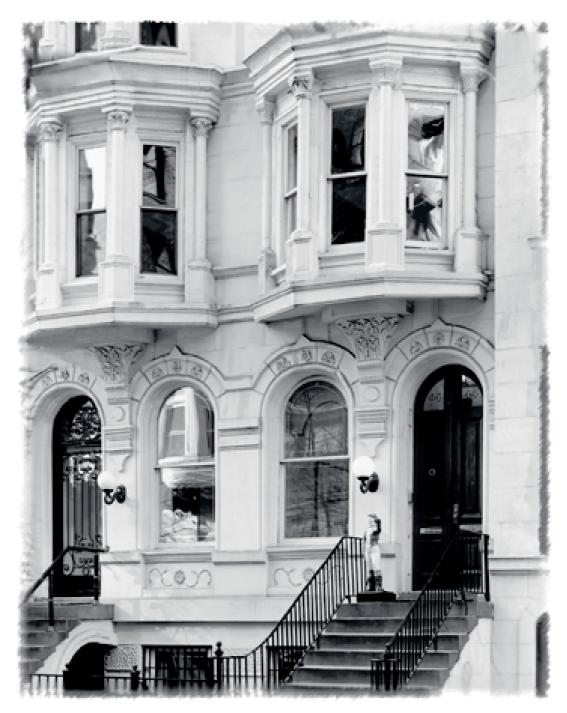
Financial Assistant

Nicholas Romano

Administrative Assistant

Tanya Tyler

Publications Manager/ Assistant to the President



The Josiah Macy, Jr. Foundation headquarters in New York City

About the Foundation

ate Macy Ladd endowed the Josiah Macy, Jr. Foundation in 1930 in memory of her father, who died at a young age. Since the mid-1960s, the Foundation has focused its resources specifically on improving the education of health professionals, particularly physicians.

A Heritage of Philanthropy

Mrs. Ladd descended from Thomas and Sarah Macy, who immigrated to Massachusetts from England in the late 1630s. In America, the Macys, who were among the first European settlers on Nantucket Island, became prosperous maritime merchants. Six generations and almost 200 years later, Captain Josiah Macy left Nantucket to establish a shipping and commission firm in New York City. In the 1860s, under the guidance of the retired Captain's sons and grandsons, the firm opened New York's first oil refinery, which was later purchased by the Standard Oil Company.

In 1876, prominent philanthropist Josiah Macy, Jr., one of the Captain's grandsons, died of yellow fever at age 38. The family's philanthropic tradition was continued by his daughter, Kate, who married the lawyer and yachtsman Walter Graeme Ladd. By the time of her death in 1945 she had given the Foundation approximately \$19 million.

Until 1945, the Foundation focused its grantmaking on medical research in such fields as traumatic shock and war-related psychiatric disorders, geriatrics and aging, arteriosclerosis, genetics and human development, and psychosomatic medicine. The Foundation's extensive conference and publication program was also begun during this period.

From the end of World War II through the mid-1960s, the Foundation supported the efforts of medical schools to expand and strengthen their basic science faculties. During that time, the Foundation also began supporting the emergent fields of basic reproductive biology, human reproduction, and family planning, and fostered their incorporation into the biological, behavioral, and social science bases of academic obstetrics and gynecology.

Since the mid-1970s, the Foundation has awarded more than 70 percent of its grants to projects that broaden and improve the education of physicians and other health professionals. For example, the Foundation has funded programs to recruit and retain underrepresented minority students in premedical collegiate programs and in medical schools, provide sabbatical leaves for medical school faculty, expand pediatric training programs in developing

countries, and develop medical history programs in U.S. medical schools. The Foundation also has supported projects in emergency medicine and the education of physician assistants.

In 1981, the Foundation refocused its Minorities in Medicine program to support academic enrichment programs for minority high school students interested in careers in medicine and the sciences. These high school programs were so successful that, in 1990, the Foundation established Ventures in Education, now an independent corporation, to replicate these programs across the nation.

Also during the 1980s, the Foundation funded studies at medical schools and universities in the cognitive sciences in medicine, including studies of the clinical decision-making process used by physicians and the application of basic science knowledge to clinical reasoning. Additionally, the Foundation supported programs at medical schools and research institutions that encouraged doctoral candidates in biomedical science to pursue careers in research relevant to human disease by providing them with special educational programs in human pathology and physiology.

In the early part of the 1990s considerable emphasis was placed on health educational strategies that would enhance primary care in the U.S. health care system. Then, with the retirement of Dr. Thomas Meikle, Jr. as the fifth president of the Foundation, the Board of Directors of the Macy Foundation devised a policy statement to give focus to discussions with potential successors for that position. Central among the points made in that statement was the mission to "develop, monitor, and evaluate projects which demonstrate new approaches to addressing problems in health professions education."

With the guidance of that mission statement, the new president, June E. Osborn, M.D., formulated four areas of particular emphasis in grant-making. They are: 1) projects to improve medical and health professional education in the context of the changing health care system; 2) projects that will increase diversity among health care professionals; 3) projects that demonstrate or encourage ways to increase teamwork between and among health care professionals; and 4) educational strategies to increase care for underserved populations.

While no effort is made to achieve a strict proportion of Foundation activities across the four areas at any one time, an overall balance is attempted. In addition, they provide useful guidance in assessing the relevance and importance of grant proposals as well as in determining and designing conferences sponsored by the Macy Foundation.



Kate Macy Ladd (1863-1945) — A Woman of Foresight

President's Statement

Themes of the Macy Foundation

Since its inception in 1930, the Josiah Macy, Jr. Foundation has been dedicated to improving the way in which health professionals are educated and trained, in order to better serve and improve the health of the public. Mrs. Kate Macy Ladd, in her remarkably wise terms of endowment, enjoined the Foundation to invest in "a few things, not many..."; "to support institutions rather than individuals"; to "take more interest in the architecture of ideas than in the architecture of buildings and laboratories"; and to fund efforts across the whole range from biological to social sciences in order to improve health care. Her summary vision was that the Foundation would "devote its interests to the fundamental aspects of health, of sickness, and of methods for the relief of suffering."

More than seventy years later, her insight and wisdom continue to guide our philanthropy. Over the intervening decades, the kinds of grant-making activities undertaken have evolved with the times, while staying true to the founder's goals. In the years before and just after World War II, national funding for biomedical research was marginal, and the Foundation was able to use its leverage to lend momentum to avant-garde areas such as cybernetics, and to areas of research opportunity or need highlighted by the war, such as renal physiology, hematology, endocrinology, genetics and neuropharmacology.

With the development in the l950s and l960s of the National Institutes of Health in its modern configuration, the Foundation's use of scarce leveraging funds was redirected primarily to matters related to undergraduate medical education. By the 1990s issues of primary care emerged as dominant, since the national tendency toward increasing specialization made primary care physicians a seemingly endangered species. In no context was the consequence of that decline in primary care givers more evident than among underserved populations. That made the Macy mission more pertinent than ever, since an underlying theme throughout the Foundation's history has been increasing representation of minorities in the health professions.

As I took over the presidency of the Foundation in 1997, those issues of improving health professional education, of educating primary care professionals, and of increasing access and utilization of health care by the underserved were well established. The main theme added was that of interdisciplinary aspects of health care, which focus was achieved through both Macy Conferences and grant mechanisms. In those endeavors

it became increasingly clear and worrisome that formidable "silos" surrounded each health profession, with a notable dearth of mutual respect and a resultant gap and/or redundancy between and among health professions. Improving the interfaces between and among the several health professions is a goal that would clearly contribute to the health care and well-being of the public.

Those are the themes represented in the grants and conference activities described in this annual report. However, given the particular attention currently being paid to increasing minority representation in the health professions, I have chosen to devote the remainder of my remarks to that theme, which is growing in importance steadily and which continues to represent a dominant emphasis for the Macy Foundation. In the context of recent "affirmative action" decisions by the U.S. Supreme Court, the lag in proportionate minority representation among students in most of the health professions, and the growing evidence that lack of such representation among health professionals leads to lower quality of care for many populations, special attention and emphasis has never seemed more timely.

Dividends of Diversity in the Health Professions

The desirability of diversity in the health professions seems - on the face of it - to be a remarkably straightforward matter, for diversity is at the heart of human history and is central to our identity and hope for future progress. The whole exciting saga of humanity exults in the variety and adaptability of our species; and indeed the phenomena of biology are fundamentally predicated on change. Thus one could be quite succinct in describing the need to accommodate to diversity and confident about the manifest benefits that would be expected to arise from such considerations in the specific context of health professional care for diverse populations.

What is more, even cursory reading of our nation's history shows that its very creation was impelled by a sense of the need to be free and to tolerate difference: the right to life, liberty and the pursuit of happiness. Since at least the first and third of these are predicated on optimal health, our specific concerns about diversity in the provision of health care follow naturally.

Sadly, despite their wisdom, the founding fathers neglected to incorporate all people in their remarkable vision, and we continue to this day to cope with the consequences, both the positive and the negative. On the one

hand, the tradition of welcoming all comers to a land of opportunity is strong and durable. On the other hand, exclusionary thinking survives. Unfortunately, it is all too easy to espouse the principles of universal inclusiveness while performing sleights-of-mind that overlook inequities that persist and even grow; and nowhere is that more punishing than in the arena of health care access, utilization and delivery.

While those are rather simplistic assertions, I believe strongly that we must have clear rationales and ultimate goals firmly in mind when we begin to identify impediments that stand in the way of their achievement. And as we know, the underrepresentation of minorities in the health professions and the underserving of subsets of our increasingly diverse population are linked, have evolved inexorably, and have proved refractory to facile solutions. Furthermore these inequities have demonstrably adverse health consequences. The continued failure to resolve them will postpone full realization of our nation's wonderful potential.

Disparities in Health Care

Let me begin with diversity of health status, for in recent years that topic has been addressed with increasing rigor and presents us with evidence of serious problems that must be overcome. It is perhaps not surprising to learn that immigrant populations and those whose economic status or geographic locale put them at a distance from sophisticated centers of care are at a health disadvantage: birth weights are lower, longevity is curtailed, mortality rates from cancer, heart disease and the like are higher, and burdens from chronic diseases are greater. A number of recent studies have underscored the assertion that economic status alone plays a powerful role in determining health status and longevity, so persistence of poverty in our wealthy land contributes to health inequalities. Since the burdens of poverty fall disproportionately on women and especially on children, the dismal trajectory of disadvantage and, therefore, of ill health reaches far into the future.

Those bad facts of life are intensified by our system of health care financing; for not only are the uninsured at risk of poor (or no) care, but increasing numbers of fully employed but relatively low income families must make choices between sustenance and health care. Our "safety nets" for such people have become dangerously ragged and frayed, even as health insurance costs drive more and more people into their ambit.

So the hard core facts of our nation's increasing diversity predicate problems by themselves. Were our health care providers truly representative of our diverse population, there would still be massive challenges, but the extent of their underrepresentation is striking and can be shown to contribute to the problem. Thus it was, several decades ago, that efforts to increase

diversity in the health care workforce began and, for a while, succeeded.

Sadly, those trends toward more adequate representation have been reversed in recent years and are currently under considerable threat as quarrels about "affirmative action" run afoul of plans to attain wished-for progress to redress large gaps in our country's needs. The trend to increasing diversity in our population is accelerating, and the correlation of good health status with national strength, stability and productivity is readily shown. Disparities in health among various sectors of our population represent an increasingly glaring gap in the proclaimed goal of equality for our people.

Lack of Diversity among Health Care Providers

But there is more to it than that, for even the health care presently available to our population, when access and financing are accounted for, is demonstrably uneven, which raises the important issue of quality of care. That next step in this discussion must be taken carefully, for it brings up troubling matters of attitude and bias that most of us would like to think could not enter the sickroom.

But we must be clear-eyed and recognize that there is a serious hazard in assuming that the simple fact of educating more minority health care providers would be directly responsive to the needs of underserved populations. It is urgently necessary, and it would certainly help. But there are more benefits to redressing these ills than simple increase in numbers can achieve - our whole health care work force must learn what is needed to care for all people in need of care. And just as it has been argued that there is an intrinsic benefit to diversity among undergraduates during their education, so it is at least as much the case for health professionals.

It is widely perceived—with some data to support it—that health care providers from underserved parts of the population are more than usually likely to return to their communities and "take care of their own." Sadly, it is also established, with increasing clarity, that under present circumstances, minority populations receive a lower quality of care than do majority patients when cared for by majority physicians, even if access is assured.

It is unpleasant but useful to contemplate why that disparity might be. The harshest assumption is that such patients are deemed in some sense to be less "valuable" or worthy of the highest level of professional attention. I am old enough to be sure that some of that ugliness of attitude happens sometimes—indeed, I have seen it rear its abominable head from time to time throughout my medical career.

But I think a more pervasive reason for that shortfall in quality of care arises from unfamiliarity and a sense of estrangement between patient and health

care provider, and in both directions. Despite the gross statistics showing just how varied our population is, many people are put off by superficial aspects of diversity - be it skin color or style of dress or manner of speaking. And in being distracted by those details, such people are incapacitated in their ability to identify and resonate with common themes of humanity. Paradoxically, it is in the context of life-and-death situations or the threat of illness and incapacitation that those common human threads are most visible, but also most apt to fray if unrecognized. As noted above, the failure to appreciate our commonality cuts both ways; and while we have moved rapidly toward ostensible variety in our society, continued separatism keeps us at a distance as strangers whose illness, on the one hand, and compassion, on the other, are filtered through prisms of misunderstanding. It would certainly help if we got to know each other better.

Cultural and Linguistic Competence

There is much talk these days about cultural competence. I do not want to seem to disparage it, for efforts to bridge gaps between cultures are clearly worthwhile and important. Similarly there is no question that linguistic divides can thwart severely any efforts to provide quality health care. But either consideration can prove to be crippling if addressed superficially or poorly.

Let me illustrate what I mean. This Foundation, known for its major theme of improving health professional education, receives numerous proposals that purport to improve the teaching of "cultural competence" or describe plans to insert specific modules of language instruction into curricula. I am struck by how few of those well-meaning applicants are aware of the enormity of the task, especially if it is approached in an uninspired or pedestrian fashion. Often the assumption is that brief representations of "black and Latino culture" will contribute to understanding; or that the addition of minimal Spanish (and in parts of New York, Chinese and Russian) vocabularies will help. Another approach, on the language side, is to propose that efforts be made to amplify available pools of interpreters. Again, I don't want to undervalue such efforts, although it is in their flaws that one must look for guidance concerning more helpful approaches.

There is, of course, no such distinctive, sharply defined thing as "black culture," and efforts to simplify such matters lead almost inevitably to stereotyping that is anything but helpful. As to "Latino" culture, on even superficial inspection it becomes evident that our "fastest growing minority" is comprised of literally dozens of subsets, who often consider each others' ways all but incompatible. As to communication, in our large cities, as many as 80 or 100 different languages may be used, and brief "medical lexicons" fall far short of the words needed for optimal (or even minimal) care.

Even in the context of supposed commonality of language, pitfalls arise. As an illustrative case in point: early in the years of the AIDS epidemic, the Centers for Disease Control launched a well-meaning effort to translate AIDS-prevention brochures and materials into Spanish from the original texts in English. A colleague of mine, who was a Mexican-American sociologist working in a public health department on the West Coast, examined the products of translation, which had been done by someone with a Puerto Rican heritage. He was initially shocked at the crudity of language in the brochure, he said, until he recognized the linguistic fact that assertions about sexuality that were delicately phrased for Puerto Rican consumption were positively lurid in Mexican-Spanish idioms and phrases (and, as he noted, the converse would have been true as well). The nuances of language usage in the two cultures were anything but interchangeable!

I do not make these points to be nihilistic. The improvement in teaching of communication skills in health professional schools has been a major focus of some of our grant-making. Efforts to improve cultural competence and to bridge the chasms of language must be made with skill and energy, and I have no doubt that success in those endeavors can make a notable difference in achieving equality of health care. But I feel that it is crucially important that students in the health professions be made aware at the very outset of their education and training that factors of culture, ethnicity and communication will be central to their success in delivering care to all their patients. Thus it is key that our rich diversity be represented among students of medicine, nursing, dentistry, public health, and the many other professions that contribute to effective health care delivery.

Identification, recruitment, retention and training of underrepresented minorities in the health professions

Thus there is a strong case to be made for increasing diversity among health professionals—not only for purposes of equity but also for improving the quality of health care for all our citizens. A healthy citizenry is a national need of major importance, and it cannot be achieved without redress of substantial disparities, including more minorities in the health professions.

Similarly, it may well be possible to improve the attractiveness and feasibility of undergraduate programs that prepare students for health professional education to follow. Again, role models and mentoring both play an important part in sustaining interest and firing imagination; but in this context there arises the possibility of unequal opportunity that takes the form of unevenness in academic guidance and career advice. Some undergraduate institutions have well-structured advisory programs while others' are minimal; and even in the former, the need to stay up-to-date

may not always be met due to changes in personnel or budgetary constraints. It is in this context that the Macy Foundation is currently engaged, in collaboration with Marc Nivet and using the background experience of the Associated Medical Schools of New York, in the creation of a nationally pertinent and current website that can offer access to excellent and appropriate guidance about health professional careers, thus contributing to a "leveling the playing field."

It is our intent that such access should open the way to preparation for a wide variety of health professional careers, so that students are in a position to decide for themselves which are most attractive. There is a serious hazard, in my mind, that guidance which leads inexorably and exclusively toward medical school will leave many students disappointed, often because there is a "mis-fit" between their particular skills and motivation and the deterrent effect of certain pre-medical requirements. One hopes that some of those requirements will be reexamined over time; but even as that happens, students should be made aware that there are several health professions for a reason, and that their tastes and skills can be adapted individually to a variety of options.

A final comment about avenues to pursue in expanding minority participation in health professions: we often talk about access and opportunity, but in addition to those pragmatic matters it is important to be cognizant of the need for aspiration. Surely it is in that context that mentors and role models alike play critical roles, especially for students who are the first in their family to reach beyond high school in their education. But the same factors are important at all levels, and thus efforts to improve representation and increase the visibility of such minority leaders at the faculty and academic leadership levels deserve serious attention and support as well.

In summary, there are steps to be taken at every stage of the educational pathway to the health professions and thus much work to be done. In the meanwhile, while careful awareness of legal constraints must be maintained, the urgency of need for a diverse health professional workforce cannot be overstated, and efforts to optimize the career goals of students currently "in the pipeline" can reclaim some of the momentum lost in recent years. The post-baccalaureate program of the Associated Medical Schools of New York is an example of such an effort, and while its successes (in absolute numbers) may represent only a modest step toward meeting a huge national need, models such as that deserve widespread attention. After all, the fruits of success in these efforts—that is to say, the dividends of diversity—will be measured not only in equity and equality of opportunity, but also in the health of our nation and its people.

In discussing how to achieve that goal, conversation always turns quickly

to inadequacies in "K through 12." I fully agree that there is room for a lot of work to bring the excitement of fundamental knowledge, especially in the sciences, to the earliest stages of education. Efforts at enrichment in those early years can set the stage for great dividends to follow; and exposure to inspiring role models and mentors can contribute greatly. I am aware that many efforts have already been made in those regards; I am less sure that key elements of success have been identified consistently among them, and it would be very helpful to know why some programs work while others have little staying power.

June E. Osborn D.

June E. Osborn, M.D.

Programs

Diversity Among Health Professionals



NEW INITIATIVES

A National Health Careers Website

A grant to design, program, publicize and operate a national health careers website (up to \$450,000 for three years)

Beginning Date: February 2003 Completion Date: January 2006

Associated Medical Schools of New York Principal Investigator: Marc Nivet, M.S.

A meeting of health professionals sponsored by the Macy Foundation in June of 2002 identified a number of barriers to existing efforts to increase the representation of minorities in the health professions. These included deteriorating school systems, a lack of appropriate incentives and/or perceived opportunities, difficulties with access, and a shortage of well-trained mentors and advisors to encourage and guide minority students.

What was needed, participants suggested, was a single or central

An interactive website,

explore*
HealthCareers.org
will provide
timely information
on bealth careers,
educational
requirements,
financial aid
opportunities
and finding
an advisor.

information source where advisors and students could learn about health career and educational opportunities, educational requirements, and potential sources of financial assistance. This led them to endorse the creation of a comprehensive, interactive health careers website that could be used by both undergraduates and their advisors.

In response, the Associated Medical Schools of New York proposed creating a website that would serve as a national resource for students interested in health careers as well as for their counselors. Features envisioned for the site include:

 a health professions selection "wizard" to match students with programs that would match their needs and interests, based on information entered by students

about interests, educational background and status, lifestyle choices, financial status and long-term goals;

— a career planner/timeline generator that, based on information supplied by the student, would create a customized career path timeline outlining all the steps needed for preparation, such as when to take the MCAT or DAT, when to initiate the school selection process, and when to look for internships; and a preparation checklist manager that would allow students to maintain their own online "checklist" of important dates and events in the application process.

The site will also include information on financial aid with regularly updated information from health professional schools and organizations as well as useful links and glossary assistance.

An advisory board is working with health professional organizations to develop the content and linkages for the site and also offer new ideas for content and marketing for the website. The launch of the site is expected in the summer of 2004. The two subsequent years are designated for marketing, expansion and maintenance and developing plans for self-sufficiency.

The Harold Amos Graduate Student Fellowship Fund

A grant to contribute to the endowment of the Harold Amos Graduate Student Fellowship Fund of the Harvard Medical School to support doctoral training of minority scholars in the division of medical sciences (\$250,000)

A fellowship to increase minority doctoral candidates in the biomedical sciences bonors a long time Macy Trustee.

Prior to the death of Macy Trustee Emeritus Harold Amos, M.D., three separate funds had been established in his name at the Harvard Medical School in recognition of his exceptional contributions to that institution. Subsequently the funds were consolidated into two, one of which is intended for the support of minority scholars in the division of medical sciences. The goal of this fund is to create an endowment with sufficient income to support four exceptional, but needy minority scholars in the department of microbiology and molecular genetics. Recipients will be known as

the Harold Amos Fellows.

This one-time grant is consistent with Macy Foundation efforts to enhance minority representation in the health professions.

ONGOING PROGRAMS

Women in Medicine

University of Pennsylvania Principal Investigator: Jerry A. Jacobs, Ph.D.

The last comprehensive assessment of the impact of women physicians on American medicine was made at a 1976 Macy Conference on Women in Medicine.

Since that time, little has been written about the topic. This study addresses that gap, using a number of existing databases to examine the impact of the growing numbers of women physicians on the practice of medicine over the past 30 years.

The study is examining a number of specific questions, including why women enter medicine; the course of their professional development during medical school and their choice of specialty; whether women practice differently from men; where women practice and the impact of managed care on that choice.

Data to answer these questions is being drawn from many sources, including national surveys of the career plans of college students; data collected over the past three decades by the Association of American Medical Colleges, from interviews with students before, during and after medical school; and data from Medicare that link provider characteristics with patient case files.

Findings will be published in peer-reviewed publications and/or a book.

Increasing Diversity Among Health Care Professions

University of California-San Francisco Principal Investigator: Philip R. Lee, M.D.

This grant supports an assessment of the impact of federal, state and institutional policies on the goal of increasing the representation of minorities in medicine, an issue the principal investigator has been involved in throughout the 40-year period proposed for the study. Dr. Philip Lee first served as Assistant Secretary for Health in the Johnson Administration and then, 25 years later, in the Clinton Administration. In the intervening years, Dr. Lee created and headed the Institute for Health Policy Studies at

University of California at San Francisco, an organization that has focused on health policy and its impacts on human health and illness. He is now Professor of Social Medicine Emeritus at the Institute.

Under Dr. Lee's direction, the assessment team is looking at the impact of policies on the actual matriculation and graduation of minority medical students, beginning with case studies from Stanford and UCSF for which extensive data are available. The team is now extending the study to Texas, Florida, New York, Maryland, and the District of Columbia.

In addition to available data, the study relies upon an extensive literature review; federal, state and university archival research; oral history interviews with administrators and faculty, graduates and students; document analysis; and the collection and analysis of secondary data on medical school applicants, admissions and graduates. At the project's conclusion, the team will give briefing reports to a number of audiences and prepare oral histories and articles for peer-reviewed journals.

Women's Health in Medical Curricula

Yale University School of Medicine Principal Investigator: Janet B. Henrich, M.D.

Recognizing that gender specific issues are essential to the quality of health care provided for women, a number of academic medical institutions established centers for women's health and attempted to identify gender specific material which should be included in medical curricula. Despite these efforts, though, issues affecting health care for women have not been well-represented in either medical education or medical research.

Studies of national medical school curricula will consider whether gender-specific and women's health issues are included.

In 1995, "Women's Health in the Medical School Curriculum: Report of a Survey and Recommendations," based on findings from a study conducted by the Council on Graduate Medical Education, which was the most comprehensive assessment of the subject to date, provides the basis of comparison for results of this current study. Dr. Henrich, Associate Professor of Medicine and Obstetrics/Gynecology at the Yale University School of Medicine, was the author of the 1995 report and is the principal investigator for this grant.

For this current study, Dr. Henrich is analyzing data from a medical curriculum database called CurrMIT, a restricted website developed by

the AAMC, to determine how many schools now teach some or all of the gender-specific topics identified in the earlier survey. Findings will help policy makers, professional organizations and individual institutions assess the progress that has been made in integrating the key elements of women's health into the medical curriculum, and also pinpoint areas where efforts are needed.

A Grant to Extend Funding for a New York Post-Baccalaureate Program

Associated Medical Schools of New York Principal Investigator: Marc Nivet, M.S.

A number of states have experimented with the concept of a post-baccalaureate program to increase the numbers of underrepresented minorities in the medical profession. In this program, participating medical schools have identified promising minority applicants who did not quite make the cut in the admissions cycle and then worked with them to strengthen areas of weakness through appropriate academic programs and special summer instruction to prepare them to join the next entering medical class. Students who complete the post-baccalaureate program successfully are assured of admission into the New York State medical school to which they had almost gained admission the previous year.

A successful post-baccalaureate program guarantees admission to a consortium of New York medical schools.

Now in its thirteenth year, this post-baccalaureate program conducted by eight members of the Associated Medical Schools of New York is considered to be one of the best in the country. For the first six years of the program, 20 slots per year were funded by the Federal Health Careers Opportunity Program. Since funding from that program had a strict six-year limit, the Macy Foundation Board approved a grant to support 12 students for each of the next three years

in 1998. A supplemental grant from the State of New York paid for eight additional students, bringing the total for each to 20. 182 students have graduated from the post-baccalaureate program and 177 have completed medical school. Two transitional years were supported by the Macy Board in 2001 to allow for transition to a New York State medical school-based source of durable funding.

The performance of these students in medical school has been at least acceptable in the preclinical years and indistinguishable from their peers

in the clinical years and beyond. Preliminary data suggests that many are choosing careers in primary care. In addition, first year minority enrollment in participating New York State medical schools has increased from 11 percent in 1998 to 14 percent in 2002, an increase the Associated Medical Schools attributes to this post-baccalaureate program and the support of the Macy Foundation.

The post-baccalaureate program has now been institutionalized at the SUNY-Buffalo campus. Based on the results of this program, the New York State Department of Health is providing three additional years of funding.

Neurology Fellowships for Minority Physicians

Beth Israel Medical Center and St. Luke's/Roosevelt Hospital Center, New York City

Principal Investigator: Susan Bressman, M.D.

Even though stroke is a major cause of disability in African-American, Latino and Asian-American populations, minority physicians are underrepresented in the practice of neurology and the treatment of stroke patients.

Beth Israel and St. Luke's/Roosevelt have increased efforts to attract minority physicians to their programs through this training fellowship. New Yorkers are given preference since a stated goal of the program is to increase effective specialty care for stroke patients in targeted minority communities within New York City. Now in its final year, the program also aims to increase minority participation in stroke prevention and treatment programs.

Health Professional Education in the Context of the Changing Health Care System



NEW INITIATIVES

The Macy Initiatives in Health Communication

Initiatives to disseminate the communications curriculum at University of Massachusetts-Worcester (up to \$555,000 for three years)

Beginning Date: April 2003 Completion Date: March 2006

University of Massachusetts-Worcester Principal Investigator: Aaron Lazare, M.D.

Drawing upon an existing regional network of medical schools participating in a consortium known as the UMASS Community Faculty Development Center, the UMASS team has selected Brown and Boston University to participate in an eight-month pilot project to develop and test modules for the proposed Macy Mentorship Program in Health Communications. Eight more medical schools will be enrolled for the second phase, from September 2004 through December 2005, prior to evaluation of the program. Other members of the consortium are Harvard, Yale, Dartmouth, University of Vermont, Tufts, CUNY, University of Connecticut, SUNY-Albany, New York Medical College and University of New England College of Medicine.

A consortium of medical schools successfully developed core competencies in health communication.

They will now be broadly disseminated to other medical schools.

A team of "change agents" will be identified within each participating school. These team members first will expand their own knowledge and skills in health communication education, then develop, implement and evaluate a program to enhance health communication training in their own institution. The year-long training program for teams from the enrolled schools will involve three two-day workshops, held approximately four months apart, supplemented by consultations and other activities between workshops. Each workshop will cover innovative educational methods and communications curriculum content, as well as approaches

for faculty development.

During the periods between the workshops, faculty from UMass will conduct activities to meet the specific needs of each institution's plan for enhancing training in communications. Teams will also gather data needed for program evaluation. Those data will be entered in a central data bank at UMASS and will provide the basis for objective assessment.

Health Communications Dissemination Phase

A grant to support dissemination of materials developed through the Macy Initiative in Health Communications to at least ten additional medical schools (up to \$511,877 for two years)

Beginning Date: July 2003 Completion Date: June 2005

Case Western Reserve University School of Medicine

Co-Principal Investigators: Ted Parran, Jr. M.D.; and Susan Wentz, M.D.

The Case Western Reserve University School of Medicine (CWRU) team plans workshops for faculty from medical schools in the midwest and south, offering instruction in health communications skills in undergraduate and graduate medical education. The CWRU faculty will also develop a course in health communications suitable for continuing medical education programs.

In each of the two years, three two- and a half-day workshops will be offered to a limited number of fellows, perhaps two to four, from each of the participating medical schools, for a total of 10 to 25 fellows in each group. The first two workshops will concentrate on the identified core competencies and basic strategies for teaching and evaluating communication skills. Participants will then test their newly acquired skills at their home institutions and, during the third workshop, report the results of their efforts and receive assessment and feedback from faculty and other participants.

For the two-year duration of the Macy grant, participants will attend workshops tuition-free but pay their own expenses with the expectation that that tuition will be charged for participation in subsequent years.

Though similar to the UMass program, the Case Western program focuses more directly on resident and practitioner training, features that are essential to further dissemination. This focus is particularly timely because the Accreditation Council for Graduate Medical Education (ACGME) requirements for residency training now include communication skills and many group practices are including communication skills in their rating of members, which has increased the demand for continuing medical education.

The preceding two grants reflect proposals from 2 of the 3 consortium schools involved in the extremely successful Macy Health Communications Initiative now in its fourth and final year. New York University, the third consortium school is conducting two three-day courses for medical schools in the mid-Atlantic region with funding from the original grant. They are also coordinating publication of the results in peer-reviewed journals.

The results of the Health Communications Initiative have already been reported

upon in numerous publications and at national meetings. Members of the consortium have also responded to numerous requests from other institutions seeking information hoping to duplicate the initiative. The consortia schools will continue to collaborate on major journal articles.

Training For the Use of Computerized Mannequins

A grant to train medical educators in the use of realistic computerized mannequins in the instruction of medical students and residents (up to \$450,286 for two years)

Beginning Date: March 2003 Completion Date: February 2005 Massachusetts Institute of Technology Principal Investigator: Martha L. Gray, Ph.D.

Three years ago the Macy Board awarded a grant to the Massachusetts Institute of Technology to fund the Macy Simulator Project to explore the potential for using realistic patient simulation in critical care and emergency medicine training. Through the collaborative efforts of the Harvard-MIT Division of Health Sciences and Technology (HST) and the Boston-based Center for Medical Simulation (CMS), that project developed and tested pilot cases, established a system for case documentation, implementation and integration of simulator use into existing curricula, and provided free worldwide dissemination of the pilot.

A program to "train the trainers" in effective use of patient simulators in medical school curricula.

The success of the program, to date, can be attributed to a small group of well-trained operators and users. It has become clear, however, if the use of simulation-based teaching modules is to spread and realize its full potential, that a critical component— "training the trainers"—is still missing. Initial experience has shown that the effective use of patient simulators depends upon the availability of well-trained operators and instructors.

This grant is designed to increase the number of trained operators and instructors to ensure that this promising training technology—now with approximately 400 patient simulators or mannequins in use worldwide—expands effectively. The grant also addresses the need for standards-based documentation and easy dissemination of training materials.

Building on the successful example of the Harvard-Macy Institute, the investigators intend to support a HST/CMS Institute for Medical Simulation with tuition paid by instructors accepted into the program. For the short

term, the institute will solicit applicants nationally and use Macy Foundation support to provide competitive training fellowships.

Grant money for the first year will focus on designing the "training the trainer" modules and conducting pilot-programs with participants from outside of the Harvard/MIT community. Those modules will be refined during the second year, with two or three groups of 10 trainees each recruited for three-day sessions. Site visits will be made to centers involved in the pilot-program to assess the effectiveness of the training one year after participation. In the third year, not funded by the Macy Foundation, the Institute will begin a series of sessions requiring tuition payments by trainees, in addition to conducting on-going assessment and making any needed refinements.

A Study of International Medical Graduates

A grant to support the study of "International Medical Graduates

in the United States: the Hidden Workforce" (up to \$119,515 for two years)

Beginning Date: July 2003 Completion Date: June 2005 Health Affairs/Project Hope

Principal Investigator: Fitzhugh Mullan, M.D.

One in four practicing physicians and one in four medical residents are graduates of foreign medical schools, either foreign born and trained or Americans who have gone to medical schools in other countries and returned for residency training. Because these international medical graduates have been available to fill gaps in the U.S. health care system, these physicians have had considerable impact on care both in the United States and in other countries. To date, though, little effort has been made to look at where they practice, their specialties, or the extent of their acculturation.

This project proposes to fill that gap. Dr. Fitzhugh Mullan, a long-time analyst of health care workforce issues and now affiliated with Project Hope, will dedicate about one fifth of his time over the next two years to updating and improving available data about these international medical graduates and assessing the considerable policy implications raised by this sizable workforce.

Dr. Mullan will work with the Educational Commission for Foreign Medical Graduates, the Robert Graham Center, which is the research arm of the American Academy of Family Practice, and the Health Resources and Services Administration. He will conclude his study with the publication of two articles based on data he compiles, focusing on policy issues raised by this workforce, its impact on graduate medical education, and the future of the physician workforce.

ONGOING PROGRAMS

A Blueprint for Pediatric Residency

Ambulatory Pediatric Association, Greensboro, NC Principal Investigator: Kenneth B. Roberts, M.D.

The 1996 guidelines for residency training in general pediatrics are currently used by 80 percent of the pediatric residency training programs in the country. Since those guidelines were adopted, though, the Accreditation Council on Graduate Medical Education has moved from process-based criteria to outcomes-based criteria for residency programs. This grant supports the revision of current guidelines to reflect that change and place emphasis on communication skills and self-directed learning assessment.

The Ambulatory Pediatric Association is an organization of general pediatric faculty at academic pediatric residency programs, and was designated by the Federation of Pediatric Organizations to take the lead in developing the revised guidelines. Authors have been selected as section editors for each component of the new guidelines and new content has been mounted on the association's website and field-tested by selected pediatric residency programs. The revised and final form of the guidelines will be available on the Internet and will be disseminated throughout the nation. The Federation of Pediatric Organizations will evaluate the revised guidelines for two additional years.

Improved Clinical Training for Medical Students

New York Academy of Medicine and Association of American Medical Colleges Principal Investigator: Jeremiah Barondess, M.D.

Over the past decades, the actual clinical, or bedside, training of medical students has become increasingly fragmented, due both to the growing dominance of fact-driven biomedical science and the simple reality that

senior clinicians no longer have sufficient time to teach clinical acumen and interpersonal techniques to medical students.

This is not a new problem. A strongly worded report in the mid-1980s called clinical clerkship an unstructured, haphazard apprenticeship that often failed to contribute to the overall educational objectives established for the medical student education program. Unfortunately this report had little impact. Instead, the situation continued to deteriorate. In most medical schools the third- and fourth-year clinical clerkships, which are the core of clinical education, are designed and conducted by faculty in clinical departments and no attempt is made to coordinate programs or provide any central oversight. In addition, shorter lengths of hospital stay and changes in the delivery of care have exacerbated the situation.

Jeremiah Barondess, M.D., President of the New York Academy of Medicine (NYAM), created an advisory group of academic physicians for this grant, all with considerable experience in medical education but currently in positions that permit them to take a broad look at the fundamental problems in clinical training. Building on earlier work of the Association of American Medical Colleges, the group identified changes in both medical education and health care that have contributed to the growing deficiency in clinical education.

This advisory group identified new objectives for the content of clinical education for medical students and recommended support of innovative models for the education of future physicians in the clinical transition.

Four national demonstration grants will support innovative models for the clinical education of medical students.

During an invitational conference, leaders in medical education developed a number of principles and recommendations for restructuring clinical medical education. Based on that guidance, the investigators requested proposals for new models of innovative teaching, including strategies for both long- and short-term evaluation.

The advisory group is now conducting site visits to the medical schools that submitted proposals and will select

four sites. This grant provides \$75,000 per site to carry out the proposed innovative model of clinical education. During the period of this grant, the group will continue to serve as an advisory committee, meeting with investigators, conducting site visits, and overseeing evaluation. Funding at the end of the grant will support final evaluation, publication, and dissemination of results.

A Fourth-Year Medical School Curriculum

University of California-Los Angeles School of Medicine Principal Investigator: Gerald S. Levey, M.D.

Over the past several decades, the fourth year of medical school has become increasingly flexible to give students a head start in their chosen specialty. Often this flexibility has been expanded through the introduction of audition electives, which permit senior students to opt for elective clerkships in their hoped-for field and improve their chances for being selected for choice residencies. Indeed, this trend to flexibility has become so extreme that in some institutions the fourth year is now entirely elective.

A new fourth-year medical curriculum offers five career path choices.

This grant supports an effort to restructure the fourth year of the medical school curriculum at the UCLA School of Medicine with a stated goal of recovering the fourth year of medical school in order to better prepare medical students for the challenges of providing care and conducting research in the fast-changing world of health care. The UCLA effort includes all fourth-year students and has been designed to serve as a national model.

A core group of faculty leaders has developed a five-colleges program for fourth-year students. In this program students belong to the college most closely suited to his or her anticipated career paths and will spend half of their time within the chosen college, with the remaining half available for electives. The five colleges are 1) primary care, including general internal medicine, pediatrics, family medicine, obstetrics/gynecology, and psychiatry; 2) acute care, including emergency medicine and intensive care; 3) applied anatomy, including surgical specialties, radiology, radiation oncology, pathology and related areas; 4) medical science, designed for students interested in academic careers in research and/or teaching; and 5) underserved communities.

Each college offers a college-specific curriculum block of three to four weeks at the beginning of the fourth year. Students participate in a year-long advisor/mentor program and evening seminars related to the focus of the college, and also acquire experience in pertinent patient care or research, as well as required clinical core rotations and electives. In addition they have an opportunity to pursue individual projects.

Three classes of fourth-year medical students will participate in the revised curriculum. Each class will be evaluated and, if the model proves successful, it will be disseminated to other schools.

Alcoholism and Drug Addiction Core Curriculum

Mt. Sinai School of Medicine

Principal Investigator: Mary Foley, Ed.D.

Building on their experience with a 15-hour didactic course on the subject, faculty members at Mount Sinai School of Medicine developed a core curriculum in treating alcoholism and other drug dependencies for primary care resident physicians. The goal is to improve knowledge and clinical skills in screening, early diagnosis and management of alcohol and other drug abuse. The program is available to residents from the departments of internal medicine, emergency medicine, and adolescent medicine.

Ten residents participated in each of the three years of the grant. After completing the course, residents chose an elective in either the Narcotic Rehabilitation Center or the Adolescent Health Center based in the hospital community. Faculty include Dr. Mary Foley, an Assistant Professor of Community Medicine, and Elizabeth J. Garland, M.D., an Assistant Professor in both Community Medicine and Prevention and in Pediatrics. Barry Stimmel, M.D., Dean for Graduate Education at Mount Sinai and Editor of the Journal of Addictive Diseases, provided oversight for the program.

Fast Track for Academic Nursing

University of Michigan School of Nursing Principal Investigator: Ada Sue Hinshaw, Ph.D., R.N.

This project addresses the "graying" of nursing faculties, a problem which has

become especially acute in academic nursing where the average assistant professor is nearly 50 years of age. A typical academic nursing career pattern includes completion of the R.N. or B.S.N., a number of years in practice, and, possibly, time out for a family before beginning an academic career. Many academic nurses have such a late start that by the time they complete doctoral programs their faculty careers are frequently limited to less than 15 years.

This program provides academic nursing with a faster track, one that is analogous to medicine's M.D./Ph.D. programs. The initial pilot-project identified promising nursing undergraduates, then provided career counseling and incentives to encourage them to progress directly from a baccalaureate or master's program to a five-year program that would lead to a Ph.D. in Nursing. The Macy grant supports three cohorts of five students for a period of five years, while the nursing school assumes full responsibility for the final two years of the scheduled seven-year program.

Increasing Teamwork Between and Among Multiple Health Professions



NEW INITIATIVES

Bridging the Gap in Psychotherapy

A grant to fund a project entitled "Bridging the gap between research and clinical practice in modern psychotherapy"

(up to \$200,000 for two years) Beginning date: July 2003 Completion date: June 2005

New York Psychiatric Institute Research Foundation of Columbia University

Principal Investigator: Myrna M. Weissman, Ph.D.

Successful
evidence-based
psychotherapies
will be compiled
for psychiatrists,
psychologists and
social workers and
sent to clinical
training directors.

A key recommendation from the October, 2001 Macy Foundation Conference on Psychiatry emphasized the need to bridge the gap between new research technologies and clinical practice in psychotherapy. The recommendation was inspired by a paper presented by Dr. Myrna Weissman which provided an overview of the new and effective evidence-based therapies which are relatively inaccessible to psychiatrists, psychologists and social workers who practice psychotherapy.

In her paper, Dr. Weissman reported that the 3 percent of adult patients who use psychotherapy remained constant over the decade between 1987 and 1997, even though the providers and the use of psychotherapy have changed. During that period, treatment has

become shorter, most patients also receive medication in addition to psychotherapy, and the proportion of older, less affluent patients has increased.

Over the same time, a number of controlled clinical trials documented the efficacy of various psychotherapeutic approaches, creating a significant gap between the availability of evidence-based psychotherapy and the training of the clinicians who actually provide psychotherapy.

For this project, investigators will compile and document, in detail, currently available evidence-based psychotherapies as well as survey a number of training programs in psychiatry, psychology and social work to determine the extent of training in these evidence-based approaches. Ultimately they will present their findings to training directors and professional organizations and through professional journals in the three fields.

The investigators believe this work is especially timely as the ever strengthening evidence-base for psychotherapy, combined with continuing demand for treatment, highlight the need for developing training models in these evidence-based approaches, if those research advances are to be translated into improved treatment for greater numbers of patients.

A Study of Four State Public Health Departments

A grant to support a comparative study of four state public health departments with attention to their history, their infrastructure and their potential responsiveness to public health needs (up to \$148,519 for two years)

Beginning Date: September 2003 Completion Date: August 2005

Principal Investigator, Laura Kahn, M.D., M.P.H., M.P.P., Princeton University

The proposal for this study was developed by faculty members at Princeton University's Woodrow Wilson School who saw a need to assess the relationship between the structure of state health departments and their ability to respond to public health needs. The study will be conducted by faculty in the Program on Science and Global Security which has recently expanded its purview to include biological security with the long-standing issues of nuclear policy and security.

Dr. Laura Kahn, a new member of the program staff, will direct this project. She has chosen New Jersey, New York, Pennsylvania and New Hampshire for the study because of substantial differences both in local health department structure and in leadership. For example, state health commissioners in New Hampshire and Pennsylvania are not physicians though those in New York and New Jersey are, while New Hampshire and New Jersey have no physicians employed by local health departments. Departments also differ in the number of local departments, with three for New Hampshire and 115 for New Jersey, and in funding sources, with New York's departments supported by state funds while New Jersey's funding comes primarily from local taxes.

The leadership, structure, capability and preparedness of four state health departments will be assessed. A major impetus for this study was provided by the ten-fold increase in federal spending for bioterrorism preparedness from 2001 to 2002, with more than \$1 billion targeted to help states and major cities enhance local preparedness and improve regional cooperation and coordination. The investigators plan to examine how these funds are being used by the different departments to determine if they are being allocated in the most effective ways. Many states and local governments are facing severe budget constraints, and

want to examine the possibility that these targeted funds are being used to replace rather than supplement existing public health services, which could signal no net gain in preparedness capabilities, or in public health.

The project will include interviews with high level state health and agriculture officials on bioterrorism preparedness and surveys of local health departments, physicians and veterinarians. Results will be published in a report on how state and local governments can most effectively utilize federal

bioterrorist funds, with best practices from each state profiled. Questions of leadership, clinical capabilities, diagnostic capabilities and communication will be addressed as will such variables as rates of vaccine-preventable diseases, qualifications of local emergency response team leaders, surveillance of animal diseases, implementation of the mandate for bioterrorism surveillance; laboratory and diagnostic capabilities at both state and local levels; and plans for communication in the event of a bioterrorist attack.

The underlying goal of this project is to identify existing problem areas and help state and local agencies put funds devoted to public health to their most effective use.

ONGOING PROGRAMS

Macy Scholars Program

Mailman School of Public Health, Columbia University Principal Investigator: Allan Rosenfield, M.D.

The Macy Scholars Program at the Columbia School of Public Health permits medical students from New York medical schools to take a cost-neutral year between the third and fourth years of medical school to obtain an M.P.H. as well as an M.D. at the end of five years. Initiated in 1999, the program is now in its fourth year.

As this program has grown in both visibility and popularity, it has received more applicants than it can accept. Fewer than half of the applicants for the third cohort could be accommodated. In addition, a number of other medical schools have inquired about the program.

As designed, no more than half of each cohort can be from Columbia's medical school; the rest come from other New York City medical schools. The need for cost-neutrality of this additional year has been reinforced by the fact that almost all unsuccessful applicants have not been able to pursue the dual degree because they had already reached their debt limit and could not afford tuition for the additional M.P.H. year.

In its 3 years, the Macy Scholars Program funded 37 medical students from six medical schools who have enrolled in almost all tracks at the school: Population and Family Health (13), General Public Health (9), Biostatistics (1), Health Policy and Management (6), Epidemiology (4) and Sociomedical Sciences (4). Minority students comprise about half of the current cohort.

Since the first graduates are only now in their residency training, the direct impact of the program on their careers, and on the practices and communities in which they will work, cannot be assessed. However, the need for individuals who can bridge the gap between medicine and public health is extremely important in light of the continuing deficiencies in the public health infrastructure.

This grant provides funding for two additional cohorts of 12 students per year, bringing the total to 61. The program is being evaluated to compare MD/MPH graduates of the Macy Program with other formats that lead to the two degrees, both at Columbia and at other institutions. The focus in the final year will be on evaluation of the effectiveness of the training in meeting the primary goal of enhancing collaboration between medicine and public health, and on determining the impact of public health training on the practice of traditional medicine by graduates of the program.

An Inter-professional Curriculum

University of Washington School of Nursing Principal Investigator: Pamela H. Mitchell, Ph.D., R.N.

Many recent activities of the Macy Foundation have identified inter-professional teaching of students as an essential step towards developing greater teamwork among health care professionals. Though several pilot studies have examined how inter-professional teaching might be accomplished, further work is needed to explore both the concept and the feasibility. This grant will help meet that need.

Inter-professional teaching and training is required in six health professional schools.

With six health sciences schools—Dentistry, Medicine, Nursing, Pharmacy, Public Health and Community Medicine, and Social Work, —and an Information Technology School which already have a record of working together, the University of Washington provided an ideal setting for this effort. The grant supports a project — formally titled The Inter-professional Bridges Program: Classroom and Clinical Linkages in the Health Sciences Curricula—to extend classroom and clinical inter-professional education into the required curricula of the seven schools.

A Center for Health Sciences Inter-professional Education, housed in the School of Nursing, has been created by deans of the collaborating schools to support the program. The program will reach 350 students each year in the professional schools. If the project is successful, it will provide guidance for other institutions interested in implementing inter-professional teaching.

Your Genes/Your Health (YGYH)

Cold Spring Harbor Laboratory DNA Learning Center Principal Investigator: David Micklos, Director, DNA Learning Center

This grant continues work begun in 1997 when the Macy Foundation supported the development by the DNA Learning Center at Cold Spring Harbor, New York, of an interactive website to teach the fundamentals of molecular biology and genetics to interested users from middle school age through adulthood. That website, DNA from the Beginning, offers an animated primer on the basics of DNA, genes and heredity and was developed by a team with expertise in biological sciences, computer science, art and publishing.

In the second phase, the same team and the same interactive website format was further developed to look at the disease consequences of some known variations in the human genome. The diseases included in this new site, Your Genes/Your Health (YGYH), are cystic fibrosis, fragile X syndrome, hemophilia, Marfan's syndrome, Duchenne/Becker muscular dystrophy, phenylketonuria, Huntington's disease, neurofibromatosis, sickle cell disease, hemochromatosis, beta-thalassemia, Tay-Sachs disease, Down syndrome, Alzheimer's and polycystic kidney disease. Since its release in 2001, YGYH has logged over 960,000 visitors averaging more than 10 minutes.

Using materials from the related genetic disease foundations and support groups, the website now includes basic information about the disease, clinical symptoms, epidemiology and frequency of the disorder, and the underlying genetics, as well as providing users with a sense of what it is like to have the disease. Once developed, the laboratory will keep the websites current, providing an up-to-date source of reliable information for health providers and patients.

Educational Strategies to Increase Care for Underserved Populations



NEW INITIATIVES

The Future of Emergency Medicine

A grant to provide half of the support needed for a study of "The Future of Emergency Care in the United States Health Care System" (up to \$450,000)

Principal Investigator: Janet M. Corrigan, Ph.D., M.P.H. Institute of Medicine

The 1994 Macy Conference and subsequent monograph on "The Role of Emergency Medicine in the Future of American Medical Care" provided the first systematic evaluation of emergency medicine as a distinct field. A number of key participants in that conference, which was chaired by L. Thompson Bowles, M.D., Ph.D., are prominent and active in the field.

In the fall of 2002, one of those participants Lewis Goldfrank, M.D., proposed that the Institute of Medicine (IOM) undertake a follow-up study in view of the many changes in the health care system in general, and emergency medicine in particular, during the intervening years. A Macy staff grant to the IOM supported a planning session early in 2003. This session was

attended by a number of participants from the Macy Conference as well as others active in the field.

A new study by the
Institute of Medicine
will look at the
roles of emergency
departments and
professional workforce
and systems issues

Their deliberations once again highlighted the crucial role of emergency medicine, which not only serves as the safety net for many of the 41 million uninsured Americans but also provides an interface between the health care system and public health. Post-9/11 threats of terrorism and bioterrorism have added new dimensions to the essential role of this field.

Planning meeting participants proposed that the IOM undertake a new study of the nation's emergency care system. The study would cost an estimated \$900,000 over an 18-month period. This grant will support half of the study costs; remaining funds have been provided by other health foundations and governmental agencies. The study will involve many key leaders in the field of emergency medicine and will be directed by Dr. Janet M. Corrigan, director of the IOM's Board on Health Care Services.

The study will follow the standard IOM/National Academy of Sciences format, with a committee that will meet several times over 15 months,

supported by a staff to gather necessary data and arrange for pertinent testimony. The committee report will be subjected to rigorous review and then issued with the imprimatur of the IOM and the National Academies. The report is expected to have major impact both on the field of emergency medicine and on health policy.

A Fund Responsive to 9/11 Issues

An internal allocation for a Post-9/11 Fund to be used for specific response to issues and needs raised by the events of 9/11/01 (\$250,000)

At the October 4, 2001 meeting, the Macy Board discussed ways the Foundation could respond to the local and national crises initiated by the terrorist attacks in ways that were consistent with the Foundation's mission. This fund of \$250,000 was to be used, as appropriate, to support proposals that meet that criteria

The Macy Foundation initially responded with grants of \$25,000 each to the United Way and to the American Red Cross of Greater New York, and with a subsequent grant to the Chairman of Microbiology at the Sophie Davis School of Biomedical Sciences (CUNY), in his role of representing the national organization of microbiology department chairs, to support the addition of a module on what should be taught to medical students in preparation for bio-terrorism.

Later grants included \$50,000 to the Health Care Chaplaincy of New York to assess the effectiveness of Post-9/11 counseling and bereavement aftercare; \$21,875 to the American Family Therapy Academy for partial support of a conference on "Terror and Trauma: Family and Community Resilience," and \$10,000 to the New York City Police Foundation to address p o s t - t r a u m a t i c stress disorder for policemen and their families. Finally, a grant of \$10,000 was made to the South Street Seaport to assist the revitalization efforts for New York's Historic Downtown area. Upon depletion of this fund, additional allocations may be designated by the Board.

ONGOING PROGRAMS

Leadership Training for Safety Net Hospitals

The National Association of Public Hospitals and the Robert F. Wagner School of Public Service of New York University Principal Investigator: Betsy Carrier, Vice President for Education and Operations, NAPH

Many medical institutions are now led by individuals with extensive management and leadership training, often putting the nation's safety net hospitals at a disadvantage if their physician leaders lack these skills. In 1999, the Macy Foundation awarded a grant to the Wagner School at N e w York University (NYU) and the National Association of Public Hospitals (NAPH) to develop a program that would help public hospital physician-leaders gain this needed expertise. That effort was remarkably successful, with 137 participants involved in 12 meetings. Those participants represented 49 hospitals and 38 medical schools in 22 states and included representatives from 63 percent of NAPH member hospitals.

This renewed project builds upon the success of that initial effort and makes it possible for the group to continue its work, with a goal of involving 100 additional medical directors and department chiefs, potentially reaching all of the safety net institutions. In addition, at the request of past participants, the group has a new session on implementing quality improvements in large safety net institutions. The NYU/NAPH is establishing a database, p o s t i n g instructional materials on the Web, and developing a resource guide for safety net hospital physician leaders. This project also is producing a peer network of trained leaders committed to maintaining and strengthening the nation's public hospital system.

Macy Conferences

Macy Conference: The Future of Pediatric Education in the 21st Century

Held in June 2003, Half Moon Bay, California Chairman: Barry S. Zuckerman, M.D., Boston University School of Medicine

In June 2003 the Josiah Macy, Jr. Foundation convened a conference to discuss the future of pediatric education and its implications for the changing needs of today's children and their parents. Conference conclusions and strategies











- 1. Barry S. Zuckerman, M.D. Chairman;
- 2. (left to right) Marie Harleston, Bernard Harleston, Ph.D., Randall Brown, M.D.
- 3. Group Photo: Macy Conference Participants
- 4. (left to right) Lawrence K. Altman, M.D., Clarence F. Michalis, June E. Osborn, M.D.
- 5. (left to right) Steven Schroeder, M.D., Richard Krugman, M.D, Laura Jana, M.D.

fell into three broad, interlinked categories: optimizing health, relationships, and equity and diversity.

An executive summary of the conference was published in 2003, and a monograph will be available in 2004 with detailed findings and information from this conference.

Proposal for the Next Macy Conference

An allocation for the funding of a Macy Conference on "Neuroscience, Behavioral Science, Psychiatry and Neurology" to be held in 2004 (\$250,000) Chairman: Joseph B. Martin, M.D., Ph.D.

Despite the dramatic recent progress in the neurosciences and the behavioral sciences, which has been augmented by rapid advances in human genetics and pharmacology, the one-time tradition of joint training in neurology and psychiatry is now relatively uncommon. As a result, potential synergies and joint opportunities and insights that might come from advances in these disparate fields do not have sufficient recognition.

In an effort to define a strategy for correcting that situation and to recognize the educational opportunities that might emerge from greater synergies, the Macy Foundation will sponsor a conference to bring together a group of leaders from the fields of neuro- and behavioral science, along with clinicians and educators from the fields of psychiatry and neurology. The conference will be held during 2004.

Dr. Joseph Martin, who will chair the conference, has served as Dean of Harvard Medical School since 1997, as well as the Caroline Shields Walker Professor of Neurobiology and Clinical Neuroscience.

51 51

Staff Grants Awarded Fiscal Year 2002-2003

AIDS-Related Community Services, New York To support a conference entitled: "HIV/AIDS, Chronic Illness, Disability and Families:	
An Integrative Approach", April 2003	\$ 5,000
American Public Health Association To convene the Student Health Alliance Leadership planning retreat, April 2003	12,000
American Foundation for AIDS Research (amFAR), New York To convene the 15th National AIDS Update Conference, March 2003	15,000
Arthur Ashe Institute for Urban Health, Inc., New York To support programs for development and effective delivery of information and services that address the inadequacies of health care in the nation's multiethnic urban communities	25,000
Association of Academic Health Centers To support "Relationships Between Medical Schools, Teaching Hospitals and Departments of Health," a project to address the issue of merging medical and public health perspectives within the curriculum	25,000
Association of Professional Chaplains, Illinois To support a convention to examine the role of pastoral care providers in the health care context as well as to collect, publish and disseminate the proceedings of the convention, February 2003	25,000
Citizens Budget Commission, New York To partially support a conference on fiscal and governance reform in New York State, November 2003	15,000
Clark Atlanta University To provide travel grants to a Scholarship of Teaching and Learning Symposium in Atlanta, Georgia, September 2003	3,000
Corporation for Supportive Housing, New York To support a model building and documentation effort to expand housing for homeless and at-risk populations in New York	25 000
in New York	25,000

Institute for Healthcare Improvement, Massachusetts Support to provide internet-based information worldwide to enable access for physicians, nurses, clinicians, and other providers seeking to improve health care delivery		25,000
Institute of Medicine of the National Academies To support the Institute's study: New Approaches to Early Detection and Diagnosis of Breast Cancer		25,000
Institute of Medicine of the National Academies To support the planning process for a project to study the status of emergency medicine in the United States		25,000
National Conference of State Legislators To support a workshop to address the shortage of dentists available to serve low-income and rural populations, May 2003		15,000
Fogarty International Center To partially support the Thirty-Fifth Anniversary Symposium of the Fogarty International Center of the National Institutes of Health, May 2003		10,000
New York University School of Medicine To support a two-day conference entitled: The Healing Continuum: Medical Humanities and the Good Doctor, October 2003		20,000
Tufts University School of Medicine To provide partial support of a project on financial conflict of interest in medicine and its effect on the profession of medicine		\$10,000
World Federation of Public Health Associations/APHA To support travel to Brighton, England for participants from underdeveloped nations to the 10th World Congress on Public Health in April 2004		20,000
Total:	\$ 3	300,000
POST 9-11 SPECIAL FUNDS South Street Seaport Museum		
To assist the revitalization efforts for New York's historic Downtown area	\$	10,000