Secure the Future

An Interview with Peter Dolan, Chairman and Chief Executive Officer, Bristol-Myers Squibb Company, and Chairman, Bristol-Myers Squibb Foundation, New York

EDITORS' NOTE *Peter Dolan joined Bristol-Myers Squibb in 1988, in the over-the-counter products division, and subsequently held senior leadership positions in a number of the company's businesses, including consumer medicines, nutritionals, medical devices, and pharmaceuticals. He was named president of the company and a member of its board of directors in January 2000, and was appointed CEO in May 2001 and elected chairman of the board in September 2001. The recipient of a B.A. degree from Tufts University and an M.B.A. from the Amos Tuck School of Business at Dartmouth, Dolan is a member of the board of directors of the American Express Company, C-Change (formerly the National Dialogue on Cancer), the National Center on Addiction and Substance Abuse at Columbia University, and the Pharmaceutical Research and Manufacturers of America.*

Peter Dolan

COMPANY BRIEF *Founded in 1887 and based in New York, Bristol-Myers Squibb Company is a global pharmaceutical and related health-care products company that discovers, develops, licenses, manufactures, markets, distributes, and sells a wide range of medicines in the areas of cancer, HIV/AIDS, schizophrenia, cardiovascular disease, and other serious illnesses. The company also provides ostomy and wound care products, nutritional supplements, and medical imaging products. Employing approximately 43,000 people in offices, research and development labs, manufacturing plants, and distribution facilities around the world, the company reported sales of $19.4 billion and net income of $2.4 billion in 2004.*

How integral is the notion of "giving something back" to the culture of Bristol-Myers Squibb?

It's a fundamental part of our culture. Our company's mission is to extend and enhance human life, and our company pledge commits us to lend a helping hand to communities and people in need. Some of the M.D.s and Ph.D.s who work in our company believe they can have a bigger impact on people's health by working with us than by practicing medicine in the community. For individuals in the sales force, I think the company's mission of extending and enhancing human life is every bit as meaningful as well. We recently reached out to help the victims of the tsunami in South Asia. We made a contribution of cash, plus medicines and other products, and then said we'd match our employees' contributions. We were incredibly impressed by the number of people who responded and the amount of money they donated. So giving back is very much part of the fabric of our company. Altogether in 2004, our company provided more than $50 million in cash contributions and $600 million in free products to people in need around the world.

In addition to your responsibilities as chairman and CEO of Bristol-Myers Squibb Company, you're chairman of the Bristol-Myers Squibb Foundation. How closely aligned is the work of the foundation with the aims and objectives of the company?

The foundation is very much aligned with the company's mission to extend and enhance human life. Its focus is on addressing major societal issues through support of a wide range of health and education initiatives. Our approach is to interpret our mission broadly – to make it more than inventing and providing new medicines, as important as that is. We also want to expand access to these medicines among a broad population of people, and we want to reach out and help build stronger and healthier communities, particularly in the developing world, where diseases like HIV/AIDS are exacting a tremendous toll. Those are the driving forces behind some of the bigger programs the foundation runs. For instance, while the business tries to expand access to HIV/AIDS medicines through the accelerated-access initiative that we're part of, our foundation is broadly addressing the HIV pandemic in Africa, through our $120-million Secure the Future initiative.

Bristol-Myers Squibb got involved in fighting HIV/AIDS in Africa before many did. What made you feel the timing was right for that, and were people skeptical about that decision in the early days?

Yes, they were. Back in the late '90s, when we initially talked about the Secure the Future program, there was a lot of skepticism about what we were trying to accomplish. At that time, the industry did not have the greatest reputation among people involved in the HIV/AIDS issue in Africa. The perception was that patents and profits were preventing medicines from reaching the people who needed them. In 1999 [U.N. Secretary-General] Kofi Annan came to Bristol-Myers Squibb and asked us to step out of the box and help in a dramatically different way. He asked us to do something that could really have an impact on this scourge that's afflicting many countries around the world, but particularly in Africa. We responded that, as a company with a commitment to HIV/AIDS research and treatments, we wanted to broaden access to antiretroviral medicines, but also tackle other serious challenges associated with the pandemic. We wanted to target regions and communities that were particularly hard hit or underserved, and make a difference there, at the grassroots level. Five years later, we can look back on what is the largest corporate contribution of its kind in the fight against AIDS in Africa and point to some of the successes we have had along the way.

As you say, this was a pioneering program in many ways. What lessons have you learned from your experiences in Africa?

It was certainly a learning experience in many respects. For instance, we learned the importance of helping African countries to help themselves – developing with our local partners workable approaches

that were appropriate to their particular situations and needs – rather than going in with our own perceived solutions to the problem. We also learned that the grant mechanism infrastructure doesn't really exist in these countries, to help local organizations write grant proposals or administer the funds. So local NGOs and community groups had to gain this capability before they could even think about getting access to funds. That's why we partnered with PriceWaterhouse Coopers and local academic institutions to train organizations on these issues, which also helped make those organizations stronger, as well as benefitted Secure the Future.

Another thing we discovered was that making a difference in the HIV/AIDS crisis is not just about providing treatment. Obviously, medicines are critically important, and we're doing our part here, but it's also about education, prevention, and community support. It's essential to build models of sustainable care, so those individuals going on antiretroviral medicines are supported by the community, who can help them stay on those medications.

A lot of people have pointed out that the stigma attached to HIV/AIDS is detering people from being tested. What can be done about that?

Some countries in Africa – for example, Uganda – have had some success in slowing down HIV infection rates by encouraging abstinence, fidelity, and the use of condoms. In Uganda, the government got involved and ran a massive education program, which was effective. So there are models of success in the region.

From a testing standpoint, when I was in Africa in January, I visited a hospital where we had donated equipment for testing. They brought in blood samples in test tubes from people living in rural villages and proceeded to measure and monitor the virus. We watched this process taking place, and it was all handled in a very routine and businesslike manner, without shame or embarrassment. Destigmatization clearly needs to occur, but the more we create models of success, the more people will see that there are positive approaches to dealing with this problem. That will break down some barriers. People will continue to come forward as treatment becomes more available.

You mentioned the involvement of the Ugandan government in educational initiatives. Do you think that level of government commitment is being demonstrated throughout Africa, or has progress been slower in certain countries?

The level of government commitment varies from country to country, but I think we're making progress. As more success stories emerge, more governments will see what's working in other places and will want to have similar programs in their own countries, to alleviate some of their own problems. Additional funding from the U.S. government and the Global Fund has also helped countries execute model programs that many of us have been helping to develop.

Partnering is clearly instrumental in the success of Secure the Future. How important are those relationships, and was it hard to find the right partners?

In a big way, Secure the Future is about public-private partnership. In 1999, we were pioneers in finding the right people and organizations to partner with. I get particularly excited when a Secure the Future grant leads to a fruitful idea that is first implemented by a public-private partnership and then replicated in other places. In my opinion, the best example of that is the Botswana-Baylor Children's Clinical Center of Excellence in Gaborone. Baylor College of Medicine provided the medical expertise for this center, and Bristol-Myers Squibb provided the funds – through Secure the Future – to build the infrastructure. With expertise and infrastructure in place, the government of Botswana was able to provide the funds to run the clinic once our grant ended. Those three pieces working together are making a very significant impact on the lives of hundreds of people. Some 1,200 children have access to world-class treatment at this facility in Gaborone. We're now rolling that model out in Swaziland and Lesotho, again with Baylor and in partnership with the governments of those two countries. This center is a really terrific example of something positive and enduring that can be replicated in other countries.

How do you rate the involvement of the business community in the fight against HIV/AIDS?

I think that many businesses in southern African can be very proud of what they've done for their own employees. They clearly recognize the challenges and risks to an employee population when the infection rates are 35 or 40 percent. What's unique about what we've done is that our work is not centered on our employees or even on our business in Africa, which is not that significant in terms of financial numbers. It's really about making a positive impact in communities that are severely impacted by this pandemic. It's a human issue.

On a larger scale, I think there are some things that businesses based in the developed world can do to address this issue, drawing on our learnings from Secure the Future. For example, I think the private sector can provide critically-needed business expertise – in finance, operations, communications and distribution, to name just a few areas – that will help sustain whatever advances are made in building up health care infrastructure and support in Africa.

Related to that point, how difficult has it been to find local expertise in those communities?

Clearly, training medical professionals to deal with the crisis has to be part of the overall solution. And there's a good amount of interest in doing this within the healthcare community. But we need more than willing doctors and nurses to have a lasting impact; we also need to have infrastructure in place, such as community-based treatment centers. We need to try to train and retain local expertise, while supplementing them with resources from other countries. We need to implement a whole host of other initiatives before we can really say we have made serious progress in confronting the huge challenge posed by HIV/AIDS. People are beginning to see that money is just part of the solution; it's also about building capabilities.

Do you ever worry what will happen after Secure the Future has run its course? It has had a major impact, but the problems are still there.

I see our investment in Secure the Future as a kind of social venture capital. We're spending money – some $120 million dollars on 170 grants – and we're willing to share anything and everything we've learned from those 170 projects with other parties who want to contribute to solving the problem. So, for example, we would like to ensure that the Global Fund for HIV/AIDS and the president's

Emergency Program for AIDS Relief incorporate many of these lessons in their programs. That would be ideal.

There are some 26 million people with HIV/AIDS in Africa. That's a mind-boggling number. Ultimately, the combination of driving down infection rates and increasing access to treatment will take us closer in the direction of a workable solution. In my view, fighting HIV/AIDS has to be as much about education and prevention as it is about treatment and care.

Can you ever take the time to step back and appreciate what you have done with Secure the Future, or are you always focused on the next challenge?

My recent trip to Africa gave me a chance to reflect on some of our successes. It was a fabulous opportunity for me to see how individuals are positively benefiting from the programs, including the Botswana-Baylor Children's Center of Excellence. When we walked through the door of that center, we could have been in any major city in the United States. We felt extremely proud of that facility and the medical care that people were getting there. Also, in KwaZulu Natal, we attended a Secure the Future-sponsored community event – with thousands of people from local communities – that focused on treatment and destigmatization. So the whole trip was quite an experience.

Turning now to the broader business of Bristol-Myers Squibb Company, when you look to the next year, are you optimistic for growth?

Yes, I'm optimistic about the company's future, but my optimism stretches beyond just the next year. I believe that in the pharmaceutical business, companies need to reinvent themselves every five years or so. When you lose exclusivity on a product, revenues on that product decline by about 90 percent in one year, so you need to make up that revenue loss. As such, there's a constant need to keep the business vibrant and healthy. If I look out over the course of the next three to five years, I certainly see attractive growth potential for the company.

Will most of that growth come from new products currently in the pipeline?

A lot of it will come from new products. We expect our number-one product, Plavix, to continue to grow over the next several years, even though a key patent for it is being challenged in the U.S. and elsewhere by generic companies, as many large products are these days. Assuming we maintain exclusivity on Plavix, that product will be a major growth driver going forward as well. Other growth drivers will be new products that we have recently launched, like Abilify for schizophrenia, Reyataz for HIV/AIDS and Erbitux for cancer. Then, in the next wave of products we hope to bring to market after them, there are medicines for diabetes, hepatitis B, and rheumatoid arthritis.

How important is partnering in the development of the business?

Partnering and partnerships have always been very important to Bristol-Myers Squibb. Much of the current revenue from our pharmaceutical business comes from products that were discovered, in large part, by other companies. We identified some of these products in the early stages and then commercialized them very successfully. Our challenge as a company is to get a better mix, so that

about two-thirds of our revenue growth comes from what we do internally and a third comes from partnerships with other companies.

Some people in the pharmaceutical industry have said that, over the past decade, there has been a drought in R&D in the industry. Do you agree with that assessment?

You can measure R&D productivity in lots of different ways. Looking only at the number of new molecular entities launched by the industry in any two- or three-year period, I think the last two or three years have been particularly challenging ones for the industry. Fortunately, in the case of Bristol-Myers Squibb, we have been very productive, with three new drugs launched between the end of 2002 and the beginning of 2004, three more regulatory submissions that we're in the midst of right now, and more behind that, we hope. So we're actually feeling quite good about our own pipeline prospects. However, from an industry perspective, there definitely are concerns about productivity. The industry is investing hugely in R&D, and we need to see that our investment is ultimately turned into products that make a difference in people's lives.

With regard to costs, do you think enough is being done to address the issues that have arisen over the price of medicines?

We are doing a number of things to address concerns people have about the financial impact of pharmaceutical products in the United States. Most people have prescription drug coverage, and that is obviously beneficial to those who have it. I think the issues come down to providing prescription drug coverage and creating access to medicines. Right now, we offer discounted medicine to senior citizens, as well as patients who don't have insurance coverage. Next year, the Medicare drug benefit kicks in, providing a drug benefit to people over 65 who don't currently have prescription drug coverage. And for many years, our company, like others in the industry, has offered patient-assistance programs to provide medicines free of charge to people in need.

There's a lot of debate about drug prices, particularly in the United States. One reason for this is that the United States is one of the very few free markets where you can price products at a level that enables you to get an appropriate return on your investment. You have to secure that return during the 10- or 12-year window when you have patent exclusivity on your drug. Other countries around the world have price controls, and with price controls have come limitations on patient choice and disincentives on investing in costly R&D. So I understand why there's so much discussion about the price of pharmaceuticals, but I think the benefits they bring dramatically outweigh the relatively small percentage of total health-care budgets they comprise.

People think of pharmaceutical R&D as primarily carried out by research scientists. Is technology playing a major role in the development of new products, and will it help speed up the time it takes to get the products to market?

Clearly, technology is making a difference. As an example, in our discovery operation we have a high through-put screening capability that enables us to screen thousands of potential combinations that we could not have screened before, when we were doing it all manually. Now, we can look at decks of thousands of these compounds, all being tested simultaneously.

Furthermore, I think technology, ultimately, will help us use medicines better, both from an efficacy and a side-effects standpoint. From an efficacy standpoint, all medicines have different profiles

and different risk-benefit ratios, such that a drug that might work for you won't necessarily work for me. Eventually, we will have a better understanding, from a genomic standpoint, of why a drug will work for you and not for me. From a side-effects standpoint, if we had a drug with a side effect that surfaced in 1 or 2 percent of the population, we could screen those people out from the beginning. That way, we could target particular therapies to particular individuals, as opposed to treating people en masse.

Does a pharmaceutical company need to be a certain size in order to succeed, or is there still a role for smaller niche players?

I think pharmaceutical companies need to be global in scale to achieve critical mass and have a sufficient pipeline. Specifically, I would suggest that companies need a minimum $1-billion R&D budget in order to be able to do both discovery and development, and to have high through-put screening and genomic programs. For a company to be able to do all that, some might peg the budget at $2 billion, and I would say it's somewhere in that range. In terms of commercializing whatever you discover, you need to either have a global sales and marketing capability, or you need to partner with another company. If you want to be a scale player, you clearly need to have critical mass.

You mentioned the need for pharmaceutical companies to have a global approach. Are you focusing on certain international markets more than others?

We have done very well in the Asia Pacific region for many years. Specifically, China is a country that presents immediate growth opportunities to us right now. Both our pharmaceutical and nutritionals businesses are experiencing tremendous growth rates there, and, clearly, the country offers extraordinary potential. We have also had good success in Japan, where we have a growing oncology business, and we're looking at potential investment in India too.

The financial community tends to concentrate on short-term, quarter-to-quarter results. As such, is it difficult to get your long-term vision across?

I think that Wall Street is beginning to understand how we work. It takes an average of 10 years to get a drug to market, from the time that drug is discovered. So we really need to be planning that far in advance. It's difficult to predict how many drugs in development will actually get to market, but, roughly speaking, around two-thirds don't make it. Using that as a benchmark, we can get an idea of what the next few years will look like.

What the analyst community has not understood as well is what happens when a pharmaceutical company loses exclusivity on a product. Revenues on a product used to decline around 10 to 15 percent in the United States after the loss of exclusivity. Now, profits decline around 10 to 15 percent in other parts of the world and about 90 percent in the United States, just in the first three months after exclusivity lapses. For a business, that could represent $3 billion – or 15 percent of the company's total sales – gone, in that short window. Of course, you can develop other products to offset that loss, and I think this industry is headed in the right direction in this regard.

There has been an unprecedented focus on corporate governance in recent years. Do you think the new regulations have put the U.S. business community back on the right track, and how much do the new rules encroach on your time?

Like all CEOs, I have had to juggle a lot of these issues. But speaking specifically about Sarbanes-Oxley, I believe its intention is good and positive, although it has required an extraordinary amount of work. We had to implement an all-hands-on-deck approach and hire consultants to get it all accomplished. The new regulations present significantly more challenges for large companies than for smaller ones, but I think they move things in the right direction.

There's so much good being done in the industry, by companies like Bristol-Myers Squibb, but public perception tends to focus on the negative. Is the industry doing enough to present a positive image to the public?

Based on what we can see, not enough is being done on the perception and image fronts. I think, collectively, we could do a better job. The industry's primary advocacy group in the United States – the Pharmaceutical Research and Manufacturers Association, or PhRMA – has represented the industry well on Capitol Hill, and I think that all of us in the industry would like to see the organization evolve beyond simple advocacy. We would like it to become a voice for the industry, promoting positive initiatives. We need to be consistently communicating the benefits of what the industry does in terms of saving and improving lives. After all, there are plenty of examples of how we help people. All the big pharmaceutical companies run patient-assistance programs, and some have been running them for quite some time. Last year, our company alone provided free medicines to over a million people in this country.

One thing we are attempting to do is get the whole industry to agree on one point of contact for people who need help getting medicine. So if you're in a difficult financial position and need help with your medicines, you can call an 800 number and reach information about what's available in the different states. And then you can apply for help using one common application form. That would dramatically increase access and availability to drugs. Right now, that exact initiative is underway in Wisconsin, New Mexico, and Georgia, and we're currently evaluating the results. This is just one example of what the industry's doing to make medicines more available.

Looking back to 1988, when you joined Bristol-Myers Squibb, did you ever imagine that you would spend so much of your career in the same company?

I joined the company in 1988 because it was a health-care company. I worked in the consumer division of Bristol-Myers Squibb, on products like Excedrin. I began working in the pharmaceutical business for the first time in 1998, and spent a lot of time learning about the R&D process, the pipeline, exclusivity losses, and patents – things that are key to the pharmaceutical business. However, most of the 17 years that I've been with the company have been spent working in all our various businesses. It really is a great company, with 43,000 employees who are hugely committed to its success.

Seventeen years ago, I don't think I ever thought I would one day be leading a company that was so focused on pharmaceuticals. And the truth is, I think of the company as having a broader remit than that. I see it as providing health care to people who need it – through nutritional products, medical-imaging products, wound care, or pharmaceuticals, as well as through access programs and initiatives like Secure the Future – with the expressed aim of extending and enhancing human life.

Many people have worked alongside you since you joined the company. What would some of them say about your management style?

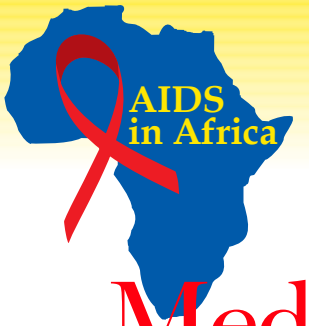
I think they would say I was a collaborative leader, relatively informal, and focused on strategy. They would say I like to know where we are going and how we are going to get there.

Are you ever satisfied?

Businesses are so challenging across the board that I don't think anyone can ever really be satisfied. I think you have to focus on continually improving your business at the same time as evolving and developing your own leadership style and managerial skills.

How difficult is it for you to get away from the business, given that we live in an age of 24/7 communications? Can you ever really switch off?

As one of my colleagues and friends said, it's a bit like having CNN on in the background 24 hours a day. The business is always there, to some extent. People can always find me, wherever I am in the world, so I'm constantly in touch. If you woke me up in the middle of the night I could start conversing on any topic that I'm familiar with in a pretty short amount of time. That said, I think it's important to decompress occasionally, so I do try to get away sometimes. ●



It Takes More than Medicine to Fight HIV/AIDS

An Interview with John L. Damonti,
President, Bristol-Myers Squibb Foundation, New York

EDITORS' NOTE *Prior to joining Bristol-Myers Squibb, John Damonti served as associate director of state government relations for Ciba-Geigy Corporation, director of the Primerica Foundation, and manager of contributions and community relations for Mutual of New York. The recipient of an undergraduate degree from Bowling Green State University and a master's degree in social work from Fordham University, Damonti serves on the boards of directors of the Cabrini Mission Foundation and FEI Behavioral Health Inc., a provider of employee assistance and crisis-management programs. He also serves on the advisory committees of the American Red Cross, the New York Botanical Garden, and the New York Academy of Medicine.*


John L. Damonti

FOUNDATION BRIEF *Founded over 50 years ago and based in New York, the Bristol-Myers Squibb Foundation funds a broad range of programs that address pressing health matters and educational issues around the world. Among the foundation's major initiatives are the Freedom to Discover program, which has provided more than $100 million in no-strings-attached research grants in the areas of cancer, cardiovascular, infectious, and metabolic diseases, neuroscience, and nutrition; Secure the Future, a $120-million, multiyear commitment to aid women and children affected and infected by HIV/AIDS in southern and West Africa; a longstanding effort to enhance science education; and support for innovative programs in women's health and health education around the world.*

What's the key mission of the Bristol-Myers Squibb Foundation?

The foundation supports and complements the overriding mission of Bristol-Myers Squibb itself: to extend and enhance human life. Clearly, that's quite a big responsibility for any company or any foundation. So even as Bristol-Myer Squibb focuses on unmet medical needs, we complement that strategy by creating and supporting sustainable programs that can build capacity and serve as catalysts to address specific areas of unmet societal needs. We work in areas where we feel we could make a difference, not just through providing funds for worthwhile efforts, but also by drawing on the knowledge, resources, and people of Bristol-Myers Squibb and the important work it is doing to advance human health and well-being.

Back in 1999, what made you feel that the HIV situation in Africa should be a focus for the foundation?

It was a matter of a number of things coming together at the same time. First, there was a pandemic that was emerging in Africa, with the potential to destroy a generation or more of people, particularly affecting the most vulnerable populations – women and children. It was a human-life issue that required a response. Second, Bristol-Myers Squibb was already a global leader in HIV/AIDS therapies. So we understood the medical side – what was possible and what else was required besides drugs. Third, the entire pharmaceutical industry was being criticized for not participating more fully in dealing with the crisis. And finally, Kofi Annan, the U.N. secretary-general, made a personal plea to our leadership to indeed lead the way.

Our challenge was to decide where we could actually make a sustainable impact. That's why we decided to go into the five countries with the highest infection rates, to focus on the women and children who were most affected and least able to fight the pandemic on their own, and to create a program that wasn't just about medicines and research, but was also about community support and infrastructure building, to deliver medical care and to deal with issues of malnutrition, education, and prevention. At the end of the day, we knew it wouldn't be easy. But it was the right thing to do and we really thought we could make a significant impact across a broad spectrum of activities.

Most importantly, when we made our first $100-million, five-year commitment, which is now $120 million – initially in five southern African countries and now in four West African countries as well – we decided that this program would not be run from corporate headquarters in New York. It had to have local roots, a local staff, local advisory committees to vet program grant proposals, and the support of each of the countries' health ministries and governments. Our work would have to be consistent with the larger health strategies in those countries. This was not only to ensure that our work was culturally sensitive and locally relevant – but, ultimately, to make it effective, meaningful, and sustainable.

On the people side, was it difficult to find talented local people who could apply the high standards for which Bristol-Myers Squibb is known?

Not at all. We hired a 12-member staff – 10 of whom are African and all of whom reflect a great wealth of talent. We attracted these people probably because we were working from a blank slate. We told them what our goals were, what our responsibilities would be, and what our ethical guidelines would insist upon. Then we told them to help us organize a pioneering program that would help their neighbors and friends, their countries, and, ultimately, their future. Our company has a long tradition of leadership development and has run a great many programs aimed at creating an environment that attracts and retains superior talent. Of course, we had to hire people who understood the culture as well as the government structures. They brought all that to the table, which was terrific. But mostly they brought a commitment to help solve the problem and an openness and inventiveness for how we were going to go about doing that – across many fronts. Everything worked a lot more quickly than I had imagined it would. We had to be responsive. We had to be quick, but we had to do it well. We couldn't – and can't – do it without that group of very talented people on the ground.

One of the greatest strengths of Secure the Future is that it treats philanthropy as if it were a business enterprise. We took a business model that a company might use when responding to any industry issue – setting realistic goals, developing controls on resources, creating performance-measurement tools to gauge how we're doing and how those we're funding are doing and where improvements are needed, aligning programs with short- and long-terms strategies and tactics – and applied all that in a philanthropic context in Africa.

One of the first things we did was run a series of countrywide grant-writing workshops, so that organizations could learn how to participate in our program. We then formed a partnership with PricewaterhouseCoopers [PWC] so that all community grant recipients that were approved by our advisory boards got a five-day site visit from PWC. These experts would work with the grantees to ensure that they were able to comply with all the qualifications we required for them to receive funding – if their ideas passed muster with our advisory boards. And if they needed extra help, we provided that. Then an independent evaluation team from the Yale School of Public Health would work with each organization on monitoring and evaluation, so they could understand the theory of evaluation and ensure that the correct indicators were in place. A local evaluator was also assigned to each grant recipient to follow the course of its program and report on the outcomes. What's more, all these initiatives, including our staff and administrative costs, were paid for outside of our $100-million commitment.

At the end of the day, it's extremely gratifying to see a small NGO that had a good idea, let's say in Swaziland, two years later presenting its results in Barcelona at the World AIDS Conference. Indeed, this training process, which included a number of other workshops on evaluation and performance monitoring and good clinical practices, plus conferences where grant recipients shared their learning, was as important as the grants themselves in the long run. It has created a capacity for self sufficiency that has been a huge asset for Secure the Future.

It seems that partnering has been a key to the success of this initiative.

It's absolutely essential, no matter whom the partners are. For example, initially, partnering with some of the ministries of health was a challenge, but it was absolutely critical to our success. Early on, some would say, "You know, it would be great if you just gave us the money and went home." We had to establish credibility and transparency, and create a track record, not only of respect, but also of consultations with these governments, so we were all aligned across common objectives. We did that through our African-based advisory boards, which really had ultimate control of which grants were provided. The governments are now an integral part of the process, and the transition has been dramatic and more successful than we would have hoped, given the challenges we faced at the outset. We understand that it is their countries we are working in, their programs, and their national treatment plans. We are supporting them and creating models with them for extending their reach and answering the difficult questions.

In addition to the ministries, we have a number of other partners, including faith-based organizations, academic institutions, and community organizations. Some of our partnerships even involve start-up NGOs that never had an organization to speak of – like a group of grandmothers caring for orphans – but just a compelling and necessary idea.

Being a leader in this area must require the foundation to continually evolve. Has the program changed a great deal since the early days?

Absolutely. That's largely due to the way Secure the Future was organized: Since it was run by Bristol-Myers Squibb, with our own local people, rather than by a third party, we were able to make mid-course changes to our funding priorities and, ultimately, to our legacy programs. There are pluses and minuses to both models. But, as I said, we were able to move quickly and evolve quickly as well. Five years ago, $100 million was one of the largest commitments ever made to southern Africa. And while Secure the Future is still probably the largest corporate commitment of its kind for AIDS in Africa, there are now millions of dollars streaming into Africa from a host of other sources. That's great. It's important that, in that brief timeframe, the political landscape of the disease has changed dramatically and it has reached the center of the global stage. Still, there is much more to be done, and it will take a significant amount of time to really reverse the course of this terrible health scourge.

In a way, what happens in a clinic – in testing and treatment – can almost be considered the straightforward part. As big a challenge is what happens when a patient leaves that clinic and goes home, stopping on the way to see the traditional healer, who may not understand antiretroviral treatment, or when there's no food to eat, so for two days he or she doesn't take any medication. Or when the patient's grandmother says, "You shouldn't be taking any pills. People are going to think you're sick and they're not going to come here." That's where the challenge lies. By bringing all our partners together in the communities where we work, through the community treatment and support centers we organized in late 2003 with $30 million in funding, we can effectively treat people with medicines while also taking care of other needs, by supporting that treatment and encouraging testing, prevention, education, income generation, better nutrition, counseling, and destigmatization. If we don't provide that kind of support after people are treated, they may stop treatment, and we'll be worse off than before in terms of fighting the disease and its consequences.

How difficult is it to evaluate success in a program like this?

We didn't go into Secure the Future with the specific goal that the infection rate was then X and five years later we wanted the infection rate to be Y. Instead, we evaluated each of our 170 grants individually. We saw that they each added to the body of knowledge, and that all the pieces added up to making a difference in the long run.

An example is the first Children's Center of Excellence on the continent. It was built in Botswana. There was a lot of skepticism about its ability to succeed in that country, because people thought no one would use it. Well, now we have 1,200 children on antiretroviral medicines there – the largest number of children anywhere in the world being treated in one center. That's why we committed to build two more centers like that one: one in Swaziland and the other in Lesotho – with additional funds outside of the $120 million. It creates an important model of hope and promise.

In terms of the practicalities of independently measuring the progress of our work, we do spend a lot of time and money on independent evaluations. We work with the Yale School of Public Health, Family Health International, and others to

monitor and evaluate the community aspects, as well as the clinical aspects of our projects.

How large a role has the leadership at Bristol-Myers Squibb played in making this program a success? And how close is the coordination between the foundation leadership and the corporate leadership?

I don't think I'd be sitting here talking about our accomplishments in Africa if it wasn't for the commitment and leadership of our senior management. This project is built upon the idea of corporate social responsibility. When we first made a commitment to this part of the world, which was not very friendly to the pharmaceutical industry at the time, we took some hard knocks. But we stood up to critics and invited them to watch what we were doing and judge us by our actions on the ground. Of course, we made mistakes along the way, but everyone understands that new ventures are risky and mistakes are part of the learning process. We could easily have saved ourselves a lot of trouble by saying, "All right, let's just rethink this. Let's go elsewhere or do something else." But our management understood that the concept was the right one. In fact, it was a pioneering concept: to create models, to test models, to develop grass roots capabilities, and to seed the future. The fact is, a project of this type has to have complete management support, because when you're investing an unprecedented amount of money and there is external skepticism about your motives, if they don't support the project, it's going to die quickly.

In short, the whole idea of committing a huge amount of money on the understanding that we had to spend it appropriately and correctly could not have become a reality unless the leadership at Bristol-Myers Squibb truly believed in what we were doing, how we were doing it, and why. Bristol-Myers Squibb has always shown an admirable commitment to philanthropy. It does not consider philanthropy to be a check-writing exercise; rather, it has actually embraced philanthropy as part of its mission to help extend and enhance life, and to make a difference. So I think when Peter Dolan, as chairman and CEO of the company and as chairman of the board of the foundation, approves our budgets and strategy, he expects us to operate with the same rigor and adherence to ethical standards and good business practices as the person managing his R&D or technical-operations budget. Actually, I'm very pleased about that. For this company, Secure the Future is clearly not just a good thing that we do; it's an essential thing that we do, and it's essential that we do it right.

Is it frustrating sometimes that the public and the press paint such a damning picture of the pharmaceutical industry, when many pharmaceutical companies are doing excellent work?

Yes, it is. I think Bristol-Myers Squibb and other companies in the sector show a phenomenal commitment to philanthropy, to social responsibility, and to sustainability. But although the industry doesn't always get a good press, I think it's fair to say that individual companies are often held in higher regard than the industry as a whole, because of their commitment to programs such as Secure the Future.

Do you ever find it overwhelming being at the helm of the Bristol-Myers Squibb Foundation, considering the depth and breadth of its work?

Having really dedicated, smart people to work with makes a huge difference. Another thing that makes my life easier is the way the foundation operates. We have internal committees on all of our philanthropic programs, so we draw on the greater intellectual resources and broad experiences of this company's people to help direct programs. For example, in our Freedom to Discover program, we have scientists from our discovery area and our clinical areas participating in identifying grantees. So, in a sense, instead of having 17 people in my group, I feel like I have 44,000 people in my group. I can always pick up the phone when I need something, because there are so many people in our company who want to help and believe in what we do. In fact, it's often a challenge to know what to do with everybody's extraordinarily good ideas.

What is the next step for Secure the Future? Do you ever worry what will happen when the program ends?

Well, the first $120 million has not been completely allocated, even though the five-year commitment is nearly at an end. There is still so much more that we have to do going forward. The community-based treatment sites we fund in six countries are going to run for two and a half more years, with full support from the foundation. Additionally, we have an NGO training institute that will continue to run within the original five countries. We also have a $15-million program of community support and medical care in West Africa that started in 2001 and is ongoing. And as we move forward, we will look at the opportunities that arise from the many things we have accomplished already through Secure the Future, decide what else we need to do, and then fund those things accordingly.

In the next stage of the program, we're also looking to assess the outcomes of the community-based treatment sites, which combine treatment with community-based support services in resource-limited settings. What potential do they have for expanding to other parts of Africa or elsewhere? If these sites are valuable, how can we begin to scale those up with our partners? Although money is very important, the lessons that everyone is learning are just as important. So we are hoping to take those lessons and, with the right partners, continue the work we started back in 1999.

And for you personally, five years down the line, can you step back and appreciate some of the success that you've had?

It's hard to do at times, when you and your team are trying to keep your eye on the ball and keep moving forward. Festus Mogae, the president of Botswana, once said, "When the history of this epidemic is written, we should all ask ourselves what we did to help." Every once in a while I think of that and I marvel at the opportunity that I've had, working with my colleagues at Bristol-Myers Squibb. We have been able to take one of the boldest steps ever taken by corporate America, to seek to make a difference to one of the most vexing and most dangerous problems our global society has ever faced. It's easy to lose sight of that, and it's always good to be reminded of that. Regardless of what else I do with my professional life – and no matter what I accomplish in my personal life – I will always look back at this time as being one of the most meaningful times in my life. Tough, yes, but satisfying beyond measure as well. ●

Promoting Health in Developing Countries

**An Interview with Dr. Jim Yong Kim, Director,
HIV/AIDS Department, World Health Organization (WHO), Geneva**

EDITORS' NOTE *Prior to joining WHO, Dr. Jim Yong Kim served as chief of the division of social medicine and health inequalities at Brigham and Women's Hospital in Boston. A physician-anthropologist by training, he is a founding trustee of Partners In Health, a Harvard University-affiliated nonprofit organization that supports health projects in poor communities in Latin America and elsewhere, and is currently on leave from his position as associate professor of medicine and medical anthropology at Harvard Medical School. Kim was a recipient of the 2003 MacArthur Genius Fellowship and was a contributing editor to the* World Health Report *in 2003 and 2004.*

Dr. Jim Yong Kim

ORGANIZATION BRIEF *Established in April 1948, the World Health Organization (WHO) is the United Nations' specialized agency for health, whose aim is the attainment of complete physical, mental, and social well-being for all peoples of the world. The agency is governed by 192 member states through the World Health Assembly, which approves the WHO program and the budget for the following biennium, and decides major policy questions.*

What contribution does WHO make in the global fight against AIDS?

WHO has three main roles to play in promoting health in developing countries: The first is advocacy, bringing the attention of the world to a particular problem. The second is expert guidance, and in this role we provide technical guidance on what to do about everything from cholera epidemics to disaster relief to HIV/AIDS. Our third role concerns technical support. In addition to writing and preparing technical guidelines, we have to actually go out into the field to make sure that they are understood and implemented in the correct way. We have a presence in 145 countries, and we provide technical support through our own country-based staff, as well as through consultants who are certified by WHO. Those are our three main roles – in general and with regard to HIV/AIDS. Within that outline, WHO is most concerned with HIV/AIDS care and treatment. We also work intensively on prevention, but other U.N. agencies are also involved in this critical piece of the response to HIV.

One of your most successful programs has been the 3 by 5 Initiative. What was the rationale behind that program, and how is it progressing?

I was one of the coordinators of the transition team for Dr. Lee Jong-wook when he was elected director-general of WHO in 2003. At that time, we sat around thinking about what needed to be done in the area of HIV/AIDS. Dr. Lee has said many times that no matter what else he does as director-general of WHO, he wants his tenure to be remembered for what he did to combat this epidemic. So, when he took office he felt that WHO had to take a really strong position on this issue, and, in a very dramatic way, stir the pot. And boy, did we ever stir the pot!

What we did was look at a target that had been announced in 2002 by the previous director-general, Dr. Gro Harlem Brundtland. He had said that if all went well, three million people should be on HIV treatment by the end of 2005. When Dr. Lee took over, we had a choice: We could either back off from that target and say we needed to go more slowly, or we could stand by it and pledge to do everything we could to reach that target – hoping, of course, that other people joined in. That's what we did, and at first the reaction was rather negative among some other agencies and some donors. They thought that we were behaving rashly, and had acted without consulting them. They thought the target was simply too big, and that it couldn't be reached. In contrast, many activists and people in the worst-affected countries were thrilled. We had wanted to set a really clear target and that's what we did. We declared the 3 by 5 Initiative a global health emergency, and, without a doubt, it has made a difference. The announcement of the target alone has had an enormous impact at the country level, which is just what we wanted.

I must admit, running this initiative is the most difficult thing I've ever done. On any given day we get attacked by the drug industry, by the research-based industry, by the generic industry, by the activists, by the donors, and by people living with HIV/AIDS. We're constantly under pressure because AIDS is an extraordinarily politicized field. However, in the end, I think almost everyone will acknowledge that we needed a shock to the system, and the 3 by 5 Initiative was an important one. So, wherever we end up at the end of 2005, I think we'll all be very proud that this target has transformed the way that we work in HIV.

Do you consider HIV/AIDS to be primarily an African problem, or do you look at the epidemic in more global terms?

Without question, it's a global problem. We're dealing with many different kinds of epidemics actually, because every country is different. For instance, in rural Malawi, a place where there's hardly any infrastructure, transmission is almost entirely through heterosexual sexual intercourse. At the same time, we have to deal with the Chinese epidemic, which is overwhelmingly from blood transfusions and now intravenous drug use. Meanwhile, in the former Soviet Union, it's an almost completely male intravenous-drug-user epidemic, which is also becoming a prison epidemic. So, on any given day, we deal with all these different aspects of the epidemic. We're a global organization and we have to deal with all those things at once. Of course, the place where the house is truly on fire, and where we're at risk of having it burn down, is sub-Saharan Africa. So most of my time is spent working on the problem there.

There has always been a stigma attached to HIV/AIDS. Do you think enough is being done to eliminate

that stigma, so people feel able to be open about living with the disease?

The situation is improving, but it's not happening fast enough. Accordingly, we're taking some measures in that regard. Until quite recently, testing could only be recommended through voluntary counseling and testing [VCT]. VCT was a fantastic concept when it first emerged. It represented a watershed event in public health, because it didn't treat HIV/AIDS as just another sexually transmitted infection. Rather, it recognized that positive status can have a severe impact on people's lives. Some people have even been killed for being HIV positive. So VCT recognized a person's right to choose whether or not to be tested, and this was an extremely important event in the history of public health.

However, now that treatment is more available, I think those ideas need to evolve as well. You have to balance the human right not to know your status – that is, the human right to be protected from stigmatization – with the human right to live. In my mind, the human right to live is the most basic human right. In the past, health professionals didn't think treatment would be widely available, so they sometimes counseled people against being tested, because of the potential for stigmatization if they had a positive result. I believe we have gone too far in that direction, and we need to change the way we do testing.

Currently, there are two kinds of testing: provider-initiated testing and client-initiated testing. Client-initiated testing is when people go to get tested because they want to know their status. Provider-initiated testing is something new and it is based on the idea that all health settings should offer HIV testing and actively encourage it. They should let people know that the possibility of treatment exists, and that it's good to know your status. When people come in sick and we suspect they may have HIV, we offer the test and go ahead and do the test unless they absolutely refuse to have it done. Before, we would have to wait for the VCT people to come and talk to patients before we could test for HIV, even if all their symptoms were crying out: HIV! And then the patients could refuse to take the test. So we are now changing how we recommend counseling and testing to be done in all developing countries. I think that's going to make a huge difference. Hopefully, knowing one's status will help prevent infection. It does tend to change people's behavior.

Another point to make is that there are very rapid tests now: You can see a patient, do the test, and get the results 20 minutes later. Then you can do the counseling right there, at the moment of learning the status. That's extremely important in terms of HIV prevention. The counseling must be done at the point when people find out their status. So, up until recently, most health-care providers were not involved in HIV counseling and testing, but now we think that every health worker throughout Africa has to be trained in counseling and testing. We're not there yet, but in the last year we have significantly changed our position on this issue.

What is your view of the business community's contribution to the fight against this epidemic?

I think that among the large developed-world companies, the research-based pharmaceutical industry has played an extremely important role in the fight against AIDS. There have been times when we have disagreed on specific points, but they're providing a lot of drugs for free or at discounted prices, which is great. They also must continue to develop new drugs and to do research. I know that from time to time some industry groups have criticized our prequalification program and some of our stands on generic drugs, but we have 192 member states and we have to respond to what they tell us, as well as do what we think is best. Sometimes this creates a bit of conflict, but most of the time, I think we have a good relationship with the business community. There are other companies that are playing an important role in the response to HIV. Mining companies, such as Anglo American, and others such as Heineken Breweries have made major efforts to treat employees in developing countries. We applaud all of these efforts. Also, the Global Business Coalition has played a critical role in organizing and accelerating the response of businesses to the pandemic.

What do you think of some of the programs run by pharmaceutical companies; for example, Bristol-Myers Squibb's Secure the Future project?

I have not been directly involved with that program, but I've visited one of its sites and I've been extremely impressed with what I have seen. Because it got into the business so early, Bristol-Myers Squibb really learned how to do it right. For instance, it learned that without really strong community involvement, treatment programs will not take off and will not be sustainable in the long term. In addition, the company allows the countries in question to buy whatever drugs they want and does not require them to purchase only Bristol-Myers Squibb drugs, which is a very rational approach. All in all, I think it's a great program and a model for projects of this type.

When you consider the progress that has been made, and your involvement in that progress, do you ever look back and ponder how far you have come?

I am certainly gratified when people acknowledge the work we are doing, like the 3 by 5 Initiative, which I talked about earlier. We really are making good progress. I'm really struck when people say to me, "How can we possibly find something that will do for prevention what the 3 by 5 Initiative has done for the treatment-access movement?" I think, "Wow! We've done some real work to change the paradigm."

However, that gratification usually lasts for just a few minutes, until I get another phone call telling me that some NGO has attacked WHO on one issue, or that other parties have attacked us on other issues. We get it from all sides. The activists don't think we're hard enough on their enemies, and others don't think we're hard enough on the activists. We try to stay in a position where we take a moderate level of criticism from everybody, and if we achieve that, it probably means we're doing okay. After all, if people were silent about what we did, it would mean what we were doing was not having an impact. So if people are telling us we're doing well but making a few missteps occasionally, then I think we're probably in the right place, and that's exactly where we are right now. ●

Government Efforts in Lesotho

**An Interview with Dr. Motloheloa Phooko,
Minister of Health and Social Welfare, Lesotho**

EDITORS' NOTE *After serving as a health assistant at Lesotho's Ministry of Health (1959-1961), Motloheloa Phooko trained as a doctor at the Hadassah Medical School in Jerusalem. He did his internship at Kitwe Hospital in Zambia, where he later served as senior houseman. From 1970 to 1974, he served as a doctor at the Ministry of Health, subsequently leaving to work in private practice. He entered politics in 2002. A regular attendee of international conferences and courses, Phooko has served as chairman of the council of the National University of Lesotho, a member of the Council of State, and a member of Lesotho's Medical, Dental, and Pharmacy Council.*

Dr. Motloheloa Phooko

How has the government of Lesotho reacted to the HIV/AIDS epidemic? Have its efforts been successful?

I attach great importance to addressing the HIV/AIDS pandemic in Lesotho. At 30 percent, the prevalence rate of the virus in Lesotho is one of the highest in the world. Clearly, we need to intervene as much as we can to stem the crisis.

Bristol-Myers Squibb's Secure the Future program broke the ground for us in the Lesotho, because it drew out antiretrovirals [ARVs] through the public sector. Last July, Lesotho's government began rolling out ARVs through public-sector channels across the country. The government has opened a total of seven centers that are now distributing ARVs to the adult population. We did not introduce children's ARVs at the beginning, but we recently received a consignment of the children's formula, so now children will also come on board. So Secure the Future has really broken the ground for us in Lesotho, and we mean to forge ahead in rolling out this program. We have three more sites to open within the next two to three months, and that will bring the number of sites to 10 in a very short space of time.

Incidentally, the rollout of ARVs in Lesotho is part of the World Health Organization's 3 by 5 Initiative. We aim to have 28,000 people on ARVs by the end of 2005. That is a tall order for a country like Lesotho, but we are determined to reach that goal. The government has also taken the bold decision to provide these ARVs free to the receiving population. As a result, we are looking out for any new partnerships that can help with these efforts.

Is there a good working relationship between the private and public sectors in Lesotho?

Yes, I think the private sector is coming to grips with understanding this pandemic. Broadly speaking, the private sector is getting more and more in line with government thinking and is embracing government initiatives. Lesotho is highly dependent on the textile industry, and this industry has come forward in the fight against HIV/AIDS. The textile industry employs between 50,000 and 60,000 workers, and we are working with the management of textile companies to mobilize those people.

In order for the pandemic to be fought effectively, people need to go for testing. But the stigma attached to this virus is hindering that process. How have you tackled this issue?

The social-marketing organization Population Services International, in partnership with USAID, has pioneered public voluntary counseling and testing [VCT] centers. So far, three of those centers have opened up in Lesotho, and there are two more under construction, which will bring the total number to five. We have noticed that an increasing number of people are coming and availing themselves of the services of these VCT centers. Rough estimates suggest that about 20,000 people have done so. I think these centers have really helped tackle the stigma problem. The availability of ARVs has also considerably diminished the stigma of HIV. We believe we have made great progress in this area, but we'd still like to see more people coming forward to find out their status. We believe that would go a long way toward eliminating the stigma issue.

Has Lesotho been able to find the talent it needs to carry out its HIV/AIDS initiatives?

Not quite. As much as we are receiving a lot of attention from international partners, up until now, not much has been done to enhance our professional capacity. This issue has not been addressed by the international community to date. However, I think we are gradually beginning to impress upon our international partners that we need capacity building as much as we need support in other areas. We need the professional capacity to be able to address these issues in their entirety. Lesotho has suffered a considerable brain drain, and we are currently surviving day to day. We would like to see more international help in bringing in the expertise that we need – at the very least, enough to make up for the loss that we are suffering. We are hopeful, but that has not materialized yet.

In a pandemic like this, how difficult is it for you to evaluate the success of your efforts?

It's very difficult. One reason is that, as a developing country, we have only rudimentary monitoring and evaluation facilities. Only now are we beginning to address this issue of monitoring and evaluation in earnest, thanks to the help of international partners. So it is very difficult to assess accurately how effective our interventions are at the moment.

How helpful are programs like Secure the Future to Lesotho?

They are extremely helpful. In front of me now is a drawing, a plan of a Children's Clinical Center of Excellence, which the Lesotho government is going to build with Bristol-Myers Squibb and Baylor College of Medicine. I recently signed a memorandum of understanding with Baylor College of Medicine, in which Bristol-Myers Squibb is a partner. We're going to put the new center right next door to the Bristol-Myers Squibb clinic. So there's no question that the involvement of Bristol-Myers Squibb in Lesotho has been substantial and extremely useful. ●

Understanding HIV in Swaziland

An Interview with Dr. John M. Kunene,
Principal Secretary, Government of Swaziland, Mbabane, Swaziland

EDITORS' NOTE *With an academic background in immunology in HIV/AIDS, the role of nutrition therapy, and the economics of health, John Kunene holds a bachelor of science degree from the University of Swaziland and an M.B.Ch.B. degree from the University of Zimbabwe School of Medicine. He has attended numerous courses and workshops regionally and internationally.*

Dr. John M. Kunene

Are you satisfied with the government of Swaziland's response to the HIV/AIDS crisis?

I don't think the government fully appreciated the extent of the epidemic until quite recently. Indeed, it took some time for government support to rise to the level it is at today, which I would say is commensurate with the size and scope of the epidemic.

Does the government have a particular focus in its efforts to curb this epidemic – be it education, testing, prevention, or treatment?

We see ourselves primarily as an implementer and a facilitator, whose role it is to give stakeholders access to the resources necessary for them to get on with their business, whatever it happens to be. The Ministry of Health and Social Welfare has already given various grants for other organizations to implement programs on its behalf. We see these other stakeholders – the organizations we fund – as an extension of ourselves. After all, there's no way we could ever be the sole implementer.

Generally speaking, as a country we are making great strides, because at the very top of the government, there has been an appreciation of what systems need to be put in place. For instance, we realized early on that it wasn't just about providing antiretrovirals. We also needed to have certain systems in place so that people could be tested. So, although it has taken a while, I believe we do now understand the nature of the problem and how to tackle it.

How do you measure your progress?

In some areas, it has been possible to get a scientific measure of our success or otherwise – for instance, when we see the incidence rates in certain age groups come down. We have been monitoring our programs for the past 12 years, and that has helped us gauge how we are doing. There are also tangible individual examples of our progress, such as people who had retired from work because they were so sick, but now want to return because they are well enough to work again, thanks to the drugs we provide.

Some smaller African countries have complained of a brain drain of talent in the medical arena. Do you have enough qualified health professionals to carry out your projects?

Swaziland has also experienced a brain drain, and it has been devastating. We invest in capacity building and give people special skills, and then six months later we have to go back to the drawing board because maybe two-thirds of those people have gone abroad. So that has been a challenge to us, and it has forced us to consider other options. Now, instead of looking for fully qualified nurses, we look for people who can be trained to provide care at a certain level, under the supervision of some of the few well-trained health professionals who are left.

All experts agree that one of the keys to cracking this epidemic is to ensure that all people are tested. However, the stigma attached to HIV is preventing people from coming forward for testing. How are you addressing this problem?

Testing is one of our major areas of focus. We are establishing testing centers right across the country, because we believe people have to know their status. Hopefully, they can then use that knowledge to access services and adopt appropriate behavioral practices.

Certainly, the stigma is an issue. But when I look at the way people are beginning to access our services across the country, I am absolutely convinced that we are beginning to get the upper hand in terms of dealing with the stigma. People are no longer afraid to come up to health workers and say, "I want to have the test. Can I do it now? I want to know my status." That has been a recent development, just in the last two years, and I think it's extremely positive. It shows that, as a country, we are dealing with the stigma issue.

Has the business community in Swaziland fully understood the issues surrounding the epidemic?

Definitely. The private sector in this country was one of the first in the region to appreciate what the epidemic meant. Various programs were put in place and the private sector has contributed significantly to this fight. As the administrator of the Swazi government, I'm proud to say that we work very closely with the business community.

How important has partnering with the international community been in the government's efforts? Bristol-Myers Squibb's Secure the Future program is one of the major initiatives in this area. What effect has that program had in Swaziland?

Secure the Future has had a significant effect in Swaziland. First, it has helped us build knowledge and capacity. A number of our officers have undergone various training programs, both within the country and in selected institutions in other places, such as South Africa. Through a program of distance learning, we now have a critical mass of health professionals who are fully trained, the brain drain notwithstanding. One of the greatest legacies of Secure the Future is the NGO Training Institute. Swaziland is proud to have this institute, which is ranked as one of the best in southern Africa.

Second, Secure the Future has helped us implement various programs to address issues affecting women and children, and some very specific programs focused on the prevention of mother-to-child transmission of HIV. So, if we look back at the five years of Secure the Future, we can see that it has made a significant dent in this crisis. ●

AIDS in Africa

A Lifeline for Swazi Children

An Interview with Busi Bhembe, Director, Swaziland Infant Nutrition Action Network (SINAN), Mbabane, Swaziland

EDITORS' NOTE *In addition to her responsibilities at the Swaziland Infant Nutrition Action Network, Busi Bhembe serves as the project director for the Pilot Operational Research and Community-based Program (PORECO), funded by the Bristol-Myers Squibb Foundation's Secure the Future program. She has a background in nutrition and project management.*

Busi Bhembe

ORGANIZATION BRIEF *Based in Mbabane, Swaziland, the Swaziland Infant Nutrition Action Network (SINAN) is a voluntary nongovernmental organization whose activities revolve around promoting, supporting, and protecting breastfeeding and safe infant-feeding practices. By providing advice, information, and equipment to local mothers, SINAN aims to encourage optimal breastfeeding, thereby reducing the mortality rate and stunting of Swazi children.*

What does the Swaziland Infant Nutrition Action Network contribute to the fight against HIV/AIDS?

Broadly speaking, our activities revolve around an interest in infant and maternal health, and the general welfare of families. We're putting as much effort as possible into the prevention of mother-to-child transmission of the HIV virus, and ensuring that those children who are born HIV positive remain healthy, while children who are born HIV negative remain so. And, of course, we want their parents to live long enough to take care of them.

The HIV problem in Swaziland is very severe. Have you seen any improvement, and are you optimistic that things are getting better?

Swaziland has a population of about 1.1 million, so it's a relatively tiny kingdom. It has a 38.6 percent HIV prevalence rate, and it's estimated that there are about 308,000 people living with HIV. Even though the problem is severe, I have seen a great improvement in the government's response and commitment to the fight against this pandemic. NGOs in the country have doubled their efforts as well. Currently, about 4,000 people are being treated in the public sector, and about 3,000 are being treated in the private and NGO sector. In 2005, the country will be focusing on the 13,000 people who need treatment but have not yet started. Infection is particularly prevalent among young people, so this is a major challenge for our country right now. But things are getting better now that access to testing and treatment has improved.

Do you focus equally on prevention and treatment?

As an organization, we focus on both components. To the people who are already infected, we try to bring hope and ensure quality care and treatment. We want people to know that even if they are infected, it's not the end of the world, because with treatment, infected people can live longer. To those who are not yet infected, we give as much information as possible and encourage them to remain negative. For instance, we have people going from house to house giving out basic information about HIV infection.

Has the government taken an active role in tackling this problem?

The government has put a lot of effort into responding to HIV. It has organized a range of programs, including one focused on the prevention of mother-to-child transmission. It has also set up the National Emergency HIV/AIDS Response Council, which is responsible for coordinating all responses to this epidemic throughout the country. Awareness for HIV/AIDS is very high in this country, which is an indication that people have received information about it. The greatest challenge of all is behavioral change. Knowledge alone will not prevent HIV; people need to change, and that starts with the individual.

Has the cost of medication come down in recent years, increasing accessibility to drugs?

Yes. The government has set up a program that addresses this issue, and now everyone who needs it has access to drugs and testing.

There has been a stigma attached to HIV that might stop people from getting tested. Do you think that is the case in Swaziland?

The stigma associated with the disease is a challenge in Swaziland. There are many reasons why people do not get tested. SINAN works mainly with mothers. Fear is their greatest barrier to testing. It does not matter how much information people have about HIV, they are scared of knowing their HIV status. Women in Swaziland tend to carry the burden of HIV. In the age group 15 to 24, the infection rate is 47.3 percent, which is really quite high. We find that most women ignore the stigma and want to be tested.

We try to teach people that when a woman walks home after visiting a clinic, she might walk in a positive or a negative state. We tell people, "Embrace her within the community. Accept her the way she is. She is part of you." And we point out that people may discriminate against this woman and then find out that they are HIV positive themselves. Maybe the very same woman they were pointing at, who they accused of bringing shame on her family or her community, maybe she will be the one person who will be their buddy when they test positive themselves. I'm referring to another interesting program we run, called the Buddies. In this program, a buddy is someone who is HIV positive who's helping another HIV-positive person. This initiative enables people to connect on a personal level with other people who are going through exactly what they are going through.

It must be very painful for you to see children and infants with full-blown AIDS.

Yes, it is. I hate seeing women who are very, very sick, carrying young children who are clearly sick too. When someone like that walks into the clinic and you find out that the tiny child she has with her is actually two years old, it is so painful. You think about the agony the child is going through and wonder: Lord, why this child? This child is innocent. ●

The Pursuit of Excellence

An Interview with Dr. Gabriel Misango Anabwani, Director, Botswana-Baylor Children's Clinical Center of Excellence, Gaborone, Botswana

EDITORS' NOTE *After studying medicine at the University of Nairobi, and completing further training in the United Kingdom and Canada, Gabriel Anabwani taught at medical schools in Kenya before relocating to Botswana in 1997, where he initially served as senior consultant pediatrician at the Ministry of Health. Over the last eight years, Anabwani has been instrumental in developing Botswana's HIV policies and programs on the prevention of mother-to-child transmission of HIV and the provision of highly active antiretroviral therapy. In April 2003, he assumed his current position and that of clinical professor of pediatrics in the retrovirology section of Baylor College of Medicine (Houston). Anabwani also serves on several national professional and technical boards in Botswana.*

Dr. Gabriel Anabwani

COMPANY BRIEF *The first of its kind in Africa, the Botswana-Baylor Children's Clinical Center of Excellence opened in June 2003, and currently provides state-of-the-art care and treatment to more than 1,400 HIV-infected infants and children from Gaborone and surrounding areas. Funded by a $6-million grant from the Bristol-Myers Squibb Foundation's Secure the Future program, and supported by the Fogarty International Center of the U.S. National Institutes of Health, the U.S. Centers for Disease Control and Prevention, and the Global AIDS Program, the center also runs education and training activities, including the development of curricula on pediatric health and HIV/AIDS for health professionals, short-term U.S.-Africa exchange fellowships, and long-term training for African health professionals.*

What is the principal focus of the Botswana-Baylor Children's Clinical Center of Excellence?

The Clinical Center of Excellence is a collaborative project between Baylor College of Medicine and the government of Botswana, with financing from Bristol-Myers Squibb's Secure the Future program. We also collaborate with the community, because all the artwork that adorns the building and all the paintings in the consulting rooms were done by children from schools around Gaborone and women from the community, respectively. Therefore, we see this center as being a model for private-public partnerships.

The core of our business here is the provision of care to HIV-infected children and their families. That care is supported by research that answers questions of importance to Botswana, and the international community as a whole, and by training health professionals in order to spread the impact of the center to more distant hospitals and countries.

How widespread is the problem of HIV in children in Botswana, and what impact have your programs had?

It is not easy to answer that question, because the number of children infected with HIV in the country has not yet been determined. However, it is estimated that about 10,000 children in Botswana are likely to be infected.

With respect to the impact of our programs on HIV infection, when we opened the center approximately one-third of the children who came here for HIV screening were found to be HIV infected. Now, between one-eighth and one-tenth of the children tested are found to be HIV infected. We do not know to what extent the center has contributed to that decline in positive identifications, but we do know that we are contributing in this area.

The other area in which we are contributing is in the provision of care at the center. To measure our true impact, we would have to take into account everybody who has trained here, including those who work in other hospitals, and how many patients they are looking after. At the center, we are looking after about 15 or 16 percent of all HIV-infected children in the country. However, when you add all the children who are being looked after by health professionals who trained here, you can see that the impact of the center is reaching far more than just 15 percent of HIV-infected children in the country.

In promoting testing, has it been difficult to overcome the stigma that is attached to this virus?

The stigma issue is very important. There has been a major turnaround over the past several years. It used to be that when we asked to test children, about 50 to 60 percent of parents would say no. When we asked to test the parents, acceptance would be even less. These days, it is very rare for a parent to say no to testing a child, or to having themselves tested.

The family care model we have developed at the clinic helps to tackle the issue of stigma within the family, and therefore within the community. This approach involves looking after HIV-infected children and their HIV-infected parents under the same roof, on the same day, attended by the same health professionals. This has succeeded in improving disclosure within the family and harnessing family support, while making it more cost effective for parents to come here. It is also a very efficient way of communicating health messages, because instead of repeating the same health message on three or four different occasions, we say it just once.

Your project has been financed partly by Bristol-Myers Squibb. Do you feel the Secure the Future program has been effective?

Yes. I don't know whether this center represents what Bristol-Myers Squibb set out to achieve in the beginning. In the beginning, I think people at the foundation wanted to focus on prevention rather than treatment. They were learning as they were running, and, a few years down the line, they realized that the two approaches were synergistic. Therefore, they began to support treatment as well as prevention. I think that the legacy of Bristol-Myers Squibb will be twofold: One, that company was the first to do what it has done. And two, the impact has really been to catalyze and transform HIV care on our continent, especially in southern and western Africa. ●

A Chance for Children

An Interview with Dr. Mark W. Kline,
Professor of Pediatrics, Baylor College of Medicine, Houston

EDITORS' NOTE *The recipient of an M.D. from Baylor College of Medicine and a B.A. from Trinity University (Texas), Mark Kline is board certified in both pediatrics and infectious diseases. He directs the AIDS International Training and Research Program at Baylor College of Medicine. Kline additionally serves as head of the retrovirology clinic at Texas Children's Hospital.*

Dr. Mark W. Kline

INSTITUTION BRIEF *Founded in 1900 as the University of Dallas Medical Department, and named an independent institution in 1969, Baylor College of Medicine comprises 25 departments and more than 90 research and patient-care centers. Located in Houston's Texas Medical Center, the college ranked 13th among the United States' top academic health-sciences centers in a recently published survey.*

What is Baylor's involvement in the fight against AIDS?

Internationally, our principal focus is on pediatric and family HIV/AIDS care and treatment, and this sets us apart from most groups that work internationally in HIV. We believe in clinical research, but principally as a means of supporting the care and treatment of children and families in very resource-limited settings globally. Our principal focus is getting state-of-the-art therapy to as many children and families as possible, to improve the health of the children and maintain the integrity of family units. Around 15 percent of all new HIV infections globally occur among children, but typically children represent a tiny percentage of those who are actually accessing treatment. Our goal is to see that children receive appropriate attention and get their share of access to the treatment that is becoming available in resource-poor settings around the world.

Are most of those "resource-poor settings" in Africa?

Yes. The epidemic has hit Southern Africa harder than any other part of the world, so Africa has been a strong focus for our efforts. However, in Asia, some parts of the Caribbean, and in Latin America, children have not gained access to treatment the way adults have, and there are a variety of reasons for this. For example, when children with HIV are restored to health, they don't go back to work, they don't pay taxes, and they don't vote, so they aren't considered as high a priority as adults. More often, though, it's simply that very few local medical professionals have any familiarity with treating children, so they're afraid to do it. In our programs, we always place strong emphasis on the education and training of local medical professionals, to try to build a human capacity for giving HIV care and treatment to children.

One of the problems of tackling this epidemic is the stigma attached to the disease. Do you think progress is being made in this area, particularly among young people?

I do. Everywhere we work, the availability of treatment has proved to be a great destigmatizer, and I think this has been underappreciated. When you offer treatment, you offer hope, and when you restore hope, you go a long way toward destigmatizing the disease. We built the first comprehensive children's HIV center in Africa in Botswana, with the support of Bristol-Myers Squibb, and before it opened in June 2003, a number of people wondered whether any children would actually come. As soon as we opened the center we were deluged. When parents understand that treatment is available, they bring their children for testing and for care. We have more than 1,200 children in care in that center today; it's the largest concentration of HIV-infected children in care in any center worldwide. So, ultimately, care and treatment serve to destigmatize the disease.

Are you planning to build a network of centers like the one in Botswana?

Yes, we now have eight centers that are linked together in a network, called the Children's Clinical Centers of Excellence, in Romania, Botswana, Uganda, Libya, and Mexico. We have two new centers that are under construction in Swaziland and Lesotho, funded by Bristol-Myers Squibb, and we hope to be announcing some additional centers within the next several months. The idea is to network all of these centers with one another to exchange the best clinical practices, training exchanges, and multicenter clinical research. Through these kinds of collaborative activities, we can change the way pediatric HIV is perceived and managed globally. We've already seen the powerful effect that these centers can have at local levels. Our challenge now is to extend these benefits globally.

What do these centers offer besides medicine?

We take a very comprehensive view of what treatment entails. It's so much more than simply seeing that the pill makes it to the child's mouth. There is a strong psychosocial component too. We don't want the children to just live longer; we want them to live better, and that means being accepted into the community. So these centers have to serve as focal points for community education on HIV as well.

You and the Baylor College of Medicine have already made an impact in this area. Do you ever step back and enjoy some of that success?

People often say, "You must feel very proud of what you've done," but the truth is, the pace of this epidemic does not give us the luxury to sit back and pat ourselves on the backs for any length of time. Of course, I'm happy that we've had the success we've had. For example, last Christmas I was in Romania at a Christmas party with around 200 children who are in care in our center there, and it was wonderful to see them looking healthy, feeling good, and doing all the things kids should be doing. But I also know that we've got to continue to work as hard as we can to see that as many children as possible around the world have the same advantages. ●

Building Capacity Where It Matters

An Interview with Dr. Lillian Kimani, Director, Bristol-Myers Squibb Foundation NGO Institute, Johannesburg, South Africa

EDITORS' NOTE *With a background in psychology and organizational management, Lillian Kimani joined Bristol-Myers Squibb's Secure the Future [BMS/STF] program in 1999, initially serving as a member of the technical advisory committee of the program's community outreach and education fund. Kimani was later appointed to assist in conceptualizing and implementing Bristol-Myers Squibb Foundation NGO Institute. With more than 15 years' experience in the field of HIV/AIDS, public policy, and management of civil society in Africa, she has played a critical role in screening and assessing funding proposals for Secure the Future's southern Africa initiative.*

Dr. Lillian Kimani

INSTITUTION BRIEF *Established in 2002 by the Bristol-Myers Squibb Foundation's Secure the Future program, the NGO Institute seeks to identify and consolidate the best practices of established NGOs in the five southern African countries worst hit by the AIDS epidemic. These practices are assessed and developed into training modules for existing and emerging community-based organizations, with the aim of creating models for integrated treatment, care, and disease management at the community level, particularly in resource-limited settings.*

How was the NGO Institute conceived?

The concept for the NGO Institute came out of discussions among members of the technical advisory committee of Secure the Future. We were concerned about what would happen after the Secure the Future five-year funding program was over. We wanted to establish a sustainable program that would be a fitting legacy for Bristol-Myers Squibb's commitment to fight the spread of HIV/AIDS. At that time we came up with three big ideas: The first was to build NGO management, governance, and leadership capacity. The second was to develop community-based antiretroviral treatment. A third was to focus on children, and especially vulnerable orphans in the region. It was decided that the NGO Institute would be the right vehicle to take the lessons learned from Secure the Future and translate them into meaningful practice, through a structured training, monitoring, and evaluation program.

What is the key focus of the institute?

Our key focus is to develop a dedicated three-year fund to build and enhance management, good governance, and leadership capacity among the community-based organizations (CBOs), faith-based organizations (FBOs) and nongovernmental organizations (NGOs) working in HIV/ AIDS programs in the five southern African countries. The vision for the institute is to empower the civil society and HIV/AIDS organizations to run effectively and professionally. The HIV/AIDS pandemic in the southern African region has left healthcare services in many areas without the capacity to provide necessary support to those infected and affected by AIDS. In response to the growing need for community care and support, an increasing number of CBOs and NGOs have been established to fill the gap where government health service either does not exist, or has been delegated out by government departments. Consequently, the institute aims to address this critical need for capacity building, focusing particularly on leadership and governance, project management, financial management, and the monitoring and evaluation of projects. We have identified these areas as particularly weak in most of the region's nongovernmental and community-based organizations.

Have you been happy with your progress so far?

Yes. The results are exciting, and the response that we have received at the regional level is very commendable. The pilot program's final evaluation, conducted by a Yale University evaluation team in July 2004, found the NGO Institute to be an excellent and useful African capacity-building model. The approach aims at developing practical and realistic logic models for each project/program of community-based organizations. The evaluation team concluded BMS/STF is laying the foundation for strengthening the capacity of the NGO sector in the fight against HIV/AIDS.

What is your view of governmental responses in those countries? Do governments understand the need for their involvement?

Yes, I believe they do. In the last few years we have witnessed very positive responses from regional governments on HIV/AIDS. Most of them have increased their efforts to create awareness of HIV/ AIDS; increased national health care budgets; and have come up with strategic plans to tackle the problem. But, having said that, great challenges still remain, and we have not seen any real political leadership in response to HIV/AIDS. The overriding challenge facing the region is translating promises and planned commitments to expanded HIV/AIDS services into programs that rapidly reach the people who urgently need them. This will involve dynamic leadership and effective management to unlock the existing constraints on resource flows.

Have you been able to step back and really appreciate what your program has achieved?

I do appreciate a lot of things. One is the commitment and strategic leadership shown by organizations like Bristol-Myers Squibb in responding very positively to the crisis in this region. I also appreciate the effort being made by individual community organizations. Most of the people working for those organizations are volunteers who just want to do something for their community. That is what is remarkable to me: Most of these people are not working for money; they are simply responding to a crisis. There is hope in the midst of this entire crisis: The regional governments have started rollout ARV community based treatment in partnership with BMS/STF and Global Fund, among others. ●

Making a Difference in South Africa

An Interview with Dr. Glenda Gray, Director,
Perinatal HIV Research Unit (PHRU), University of the Witwatersand, Soweto, South Africa

EDITORS' NOTE *An expert in the field of mother-to-child transmission of HIV, voluntary counseling and testing, and HIV-vaccine clinical trials, Glenda Gray has extensive experience in pediatric medicine, having served as a doctor, registrar, and consultant in hospitals throughout South Africa. The recipient of medical and postgraduate degrees from the University of the Witwatersrand (Johannesburg) and the Colleges of Medicine of South Africa, in addition to numerous honors and prizes, Gray served as a Fogarty fellow at Columbia University from June to December 1999 and is currently overseeing the first HIV vaccine trials to be run in South Africa.*


Dr. Glenda Gray

INSTITUTION BRIEF *Based at the Chris Hani Baragwanath Hospital in Soweto, South Africa, the Perinatal HIV Research Unit (PHRU) is one of the largest AIDS research centers in Africa. Having evolved from an HIV clinic in 1993, the unit and its 250-strong staff are involved in treatment, prevention, and psychosocial research; training; policy development; and advocacy concerning HIV-positive adults and children. The PHRU has received funding from the International AIDS Vaccine Initiative and the South African AIDS Vaccine Initiative to develop capacity for HIV-vaccine clinical trials.*

Is enough being done to address the HIV/AIDS crisis in South Africa?

Southern Africa, and particularly South Africa, has been incredibly hard hit by the HIV epidemic. We estimate that up to five million South Africans are HIV infected; that's around one in eight or one in nine people in the country. Obviously, whatever has been done to address the problem thus far has not been effective enough. To put this in terms that are easy to understand, it was estimated that a year ago South Africa lost 1,000 teachers to HIV, and we need those teachers to teach our kids. According to UNAIDS estimates, one million children in Africa lost a teacher to AIDS in 2001. That loss inevitably impacts this country's ability to maximize its human potential. In addition, we estimate that up to 25 percent of nurses in our hospitals are HIV infected. So we are dealing with a huge epidemic that has an enormous impact and, frankly, I don't think enough has been done to address this crisis.

I think the South African government, in particular, has not dealt with the HIV epidemic appropriately. Apartheid set the scene for the spread of HIV in this country, because the nuclear family was decimated by the poverty that Apartheid created. This country is in a state of emergency, with one in eight citizens HIV infected and with half a million orphans. And yet, the government has not made HIV/AIDS a priority.

What about the business community? Have companies in South Africa acted more appropriately?

The business world woke up about two or three years ago. Companies looked at the mess and saw that if they didn't do something, they would lose their workforces. They realized that it was more economically viable to keep the workforces alive than to have to retrain workers every three or four years. So, yes, the private sector has responded, but not because businesses are philanthropic; rather, because they looked at the numbers and decided that it was to their advantage to ensure that their workforces stayed alive.

What contribution has the PHRU made in the fight against the AIDS epidemic in Africa?

The PHRU started conducting research into HIV in 1993. At that time, around 3 pregnant women in a 100 million were HIV infected. Now, a decade later, 3 women in 10 are HIV infected. That's how much the epidemic has exploded in our faces. Our first piece of research was an investigation into affordable ways to prevent mother-to-child transmission of HIV. We started doing treatment studies in women and children in 1996, which was quite early for Africa.

It wasn't long before we became aware that not enough was being done on the prevention side. For instance, women who were HIV negative were being told, "Well done, and goodbye," rather than being given support and advice about how to stay negative. So we started looking at strategies to prevent HIV transmission, and became involved in vaccine trials. We started our first vaccine trial in 2003, and since then we have embarked on three more trials. Finding an effective vaccine will be a long process; I expect it will be 10 years before we find one. So we are also looking at other ways to prevent women from getting HIV, like diaphragm use.

In addition, we encourage couples to come together for joint counseling and then to have HIV tests. If we can give couples their results at the same time, and counsel them at that point, we can empower them to take important decisions around staying negative. We also do prevention work with young people. In South Africa, young girls are more likely to get infected than older women. At around the age of 20, one in four girls are HIV infected, compared to one in 14 boys. So we're trying to target young girls and develop strategies that will empower them to reduce their risk of getting HIV.

Do you ever take a moment to reflect upon what you have achieved, or are you always looking to the next challenge?

I think we could have done more. We need to be more ruthless in eradicating HIV in our community. Every time a child dies of HIV disease in Soweto, we should all hang our heads in shame. However, I realize we have made a useful contribution. When sick women and children come to us and we give them medication, it's the most beautiful thing to see them slowly taking control of their lives again – going back to work or starting school. That is immensely gratifying and beautiful to see. ●

Partnerships with Principles

An Interview with Dr. Richard Marlink, Executive Director, Harvard School of Public Health AIDS Initiative, Boston

EDITORS' NOTE *A medical oncologist and hematologist, Richard Marlink is a member of the team that initially identified HIV-2, the second AIDS virus, and works extensively in epidemiologic and clinical studies in several African countries. In addition to serving in various teaching and clinical capacities, Marlink is the principal investigator of the Enhancing Care Initiative, supported by the Merck Company Foundation and the U.S. Government, and has been published widely on the subject of HIV/AIDS. He also serves as a member of the Technical Advisory Committee of Secure the Future.*

Dr. Richard Marlink

ORGANIZATION BRIEF *Based in Boston, the Harvard School of Public Health AIDS Initiative is dedicated to promoting research, education, and leadership to end the AIDS epidemic. Through partnerships with governments and organizations in Africa and other resource-scarce settings, the institute has developed a number of sustained education and training programs, and has been responsible for many significant discoveries in HIV-vaccine development.*

What is the main focus of the Harvard School of Public Health AIDS Initiative?

The Harvard School of Public Health AIDS Initiative encompasses various activities taking place at the School of Public Health that address the AIDS epidemic. Since the mid '80s we've been creating formal partnerships with several countries in which we feel we can significantly enhance efforts to curb the epidemic. For example, we've partnered with the academic community and government of Senegal since 1986.

All of our partnerships are based on three principles, which we put down in writing when the partnerships are formed: First, we're not in charge; we're guests in someone else's house, and even if we provide funding and momentum, we're not in charge of the partnership. Second, we're there for the long haul; these partnerships indicate our long-term commitment to improving health in that country. And third, everything we do has to benefit the public health of the people in that country. It sounds very simple, but it's very important to get those principals in writing and also to live by them. By sticking to those principles, we are able to create very strong public-health partnerships that answer key questions and help implement much needed public-health programs.

Do you focus exclusively on African countries?

We focus on developing countries. So, in addition to African countries, we've partnered in Thailand and China, and our laboratory and clinical scientists come from multiple other countries.

You mentioned being in these countries for the long haul, but how long is that? Is the end in sight?

I would say we're only at the end of the beginning, and I say this for a couple of reasons: First, the virus now has spread to all corners of the earth, and is showing itself to be a mosaic of epidemics, with subtypes of the virus at times behaving differently. It will continue to be a health issue all over the world, but it is disproportionately affecting developing countries.

The other reason is that the initial response to the epidemic was characterized by discrimination and stigma, which led people to underestimate this virus. In this next phase, we've moved to a more comprehensive approach, in that we are working on prevention, we're working on a vaccine, and, importantly, we're also working on treatment and care for the millions of people living with the virus, who have been neglected. How long this middle phase of the epidemic will last will be determined by our progress in developing a vaccine. When we have completed a successful, large-scale HIV-vaccine trial, we'll be at the beginning of the end.

Do you place greater emphasis on certain aspects within your remit?

Our groups come out of a laboratory-science background, and we've broadened that to include clinical science and prevention science. Because of our laboratory background, we've been very involved in both the basic science and the development of HIV vaccines and their subsequent testing in the field. The clinical side of our activities – helping affected people and communities – has led us to get very involved in care and treatment, as well as in prevention.

Looking to the future, are we on the right track, in terms of government and business involvement as well as scientific research?

I'm optimistic about the new and creative partnerships that are developing on the vaccine side, especially through the efforts of the Gates Foundation and the National Institutes of Health, which are willing to take the necessary risks. I'm also hopeful about the partnerships between the public and private sectors, which focus on working together to achieve common goals, such as providing care and treatment. It takes time to build the trust necessary for those partnerships to work, and I think the success of the early partnerships over the past five or six years has helped host countries get over their natural mistrust of outsiders.

When you look at your achievements over the last few years, do you ever take a moment to appreciate how far you have come?

It's certainly a memorable experience walking into certain clinics in Africa and seeing patients who are smiling and looking healthy. Of course, we still have a long, long way to go before treatment is available to all the millions of people who need it, but on an individual basis, the difference we can make is quite striking.

On the program side, it's quite exhausting and frustrating, because the clock is ticking for people living with this virus worldwide. The faster we can figure out how best to give medications and how best to create an HIV vaccine, the faster we can curb this epidemic. ●

Treatment on the Move

An Interview with Dr. Desmond Martin,
Clinical Virologist, Toga Laboratories, Johannesburg

EDITORS' NOTE *Prior to assuming his current position, Des Martin served as deputy director of South Africa's National Institute for Virology, head of the Medical Research Council AIDS Virus Research Unit, and in a number of senior academic positions in South Africa. He is president and a member of the executive committee of the Southern African HIV Clinicians Society, editor of the Southern African Journal of HIV Medicine, and a member of the international scientific advisory board of Bristol Myers Squibb's Secure the Future program, among other international associations.*

Dr. Desmond Martin

COMPANY BRIEF *Established in Johannesburg in 1999 as an independent molecular diagnostics initiative to develop molecular resources in infectious disease and management capacity in HIV, Toga Laboratories provides cost-effective, scalable pathology solutions, utilizing the best and most appropriate technologies for Africa, to add value to the clinical interface. The principal activities of the HIV unit are HIV diagnostics, monitoring, and specialized HIV testing.*

How does Toga Laboratories contribute to the fight against HIV/AIDS?

Toga Laboratories is a molecular diagnostics laboratory that was started six years ago by two clinical biologists: myself and Dr. John Sim. The rationale behind it was largely to do with pricing. A number of big industrial organizations in South Africa were looking to provide antiretroviral therapies for their employees, and they wanted to get good-quality testing at affordable prices. We were able to provide that, thanks to a commitment to bring pricing down and our ability to pass on volume-related discounts to the client and, at the end of the day, to the patient. By trimming expenses along the way, we were able to do this.

From the initial concept of the Toga Laboratories, we developed a type of mobile laboratory called a TogaTainer, which is a play on the word container. And, in fact, we do utilize a shipping container, which has inside it some really good technologies that are robust and selected for use in resource-poor settings. For instance, the container comes with a backup generator, air-conditioning, and water-purification capabilities. I think this has shown people what you can do when you have the right equipment, used in the right way and quality controlled online from a central institution. The TogaTainer also enables communities to have a sense of ownership over the laboratory and the program. Because it's a mobile unit, people in many places are able to access state-of-the-art monitoring equipment that you might find in a New York clinic. Although I have been emphasizing treatment, we are also very committed to prevention strategies. Education is part of the overall fight against HIV/AIDS, but all of these initiatives should go obviously hand and hand.

You also serve as president of the Southern African HIV Clinicians Society. What is the precise nature of your work there?

The Southern African HIV Clinicians Society started in 1998 with 280 members, who were mostly based in the Johannesburg area. It has now grown into an organization of 8,700 members, and we have 27 active branches throughout our region, which comprises South Africa, Botswana, Libya, Zimbabwe, Zambia, Lesotho, Swaziland, and Malawi. We have also had a request from Nigeria to help people there develop a society that would affiliate with ours.

Our main objective is to maintain a network of clinicians who are knowledgeable in the treatment of HIV/AIDS, which would be accessible to anyone who wanted to start a program focused on HIV/AIDS. We run courses, and have trained about 3,500 clinicians, doctors, and nurse practitioners throughout the region, who have gone through a certificated course in HIV medicine, and we offer academic diplomas as well. Other activities include branch meetings on a monthly basis, which are continuing-education meetings for doctors, and we ally ourselves with various activist organizations in promoting high standards of care for HIV patients in Southern Africa. So we put pressure on governments and other authorities to do the right thing and provide antiretroviral treatment.

Do you think the business community fully understands how important it is to get involved in this fight?

The situation is getting better. The pharmaceutical industry certainly understands how important it is, and I would like to pat Bristol-Myers Squibb on the back for its efforts. Bristol-Myers Squibb provided the seed money for our society in 1998, and it has been at the forefront of bringing pricing down.

Interest among the rest of the business community started off very slowly. Then, gradually, local companies began to consider it a matter of social responsibility to provide therapy to their workforces. They recognized that it was a cost-effective option in the long run, because people were getting sick, and absenteeism and deaths were increasing. Keeping people active, productive, and happy in their work, and keeping them well on antiretroviral therapies seemed the right way to go, from every perspective.

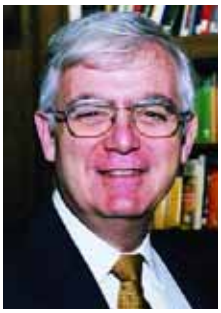
At the end of the day, can you appreciate your victories in the war on HIV/AIDS, or do the battles still ahead predominate your thinking?

We are constantly winning battles. There are battles about the development of new drugs, cheaper drugs, and less toxic drugs. There are battles about getting people onto programs or governments providing antiretroviral drugs. So there are lots of little campaigns that we can look back on and say, "Yes, we brought about this little breakthrough." However, they are relatively minor battles, and the broader war against HIV/AIDS is far from being won. In the end, I think that the only thing that's really going to stop AIDS in its tracks is a vaccine. ●

Prevention Research

An Interview with Dr. Michael Merson, Anna M.R. Lauder Professor of Public Health, and Director, Center for Interdisciplinary Research on AIDS (CIRA), Yale School of Public Health, New Haven, Connecticut

EDITORS' NOTE *Between 1978 and 1995, Michael Merson served as director of three international health programs at the World Health Organization, dealing with diarrheal diseases, acute respiratory infections, and HIV/AIDS. He is the principal investigator of Yale's AIDS international training and research programs in St. Petersburg, Russia, and Pretoria, South Africa, and directs HIV/AIDS monitoring and evaluation projects in India and Southern and Western Africa.*



Dr. Michael Merson

INSTITUTION BRIEF *Established in 1997 and based at Yale University in New Haven, Connecticut, the Center for Interdisciplinary Research on AIDS (CIRA) brings together scientists from 15 disciplines and three institutions: Yale University (with the participation of seven schools), the Hispanic Health Council, and the Institute for Community Research. The center provides infrastructure support to more than 70 research and training grants and to nearly 50 affiliated scientists.*

The Center for Interdisciplinary Research on AIDS is heavily involved in the fight against AIDS. What are some of its key programs?

I am privileged to direct the CIRA. It was established about eight years ago, and it brings together various scientists committed to undertaking research related to the HIV/AIDS pandemic. Specifically, the center focuses on prevention research, and on dealing with the consequences of the disease among vulnerable and underserved populations in the United States and abroad. Close to half of our projects are undertaken overseas, where the pandemic is, of course, most severe. This includes in Africa, India, Russia, and, to some extent, China. We also have an extensive program of training for researchers who work in various institutions in these countries, and in Africa and India, we do some monitoring and evaluation work.

How much does the success of your programs depend on partnerships, with either businesses, fellow scientists, or governments around the world?

This epidemic is truly global and we all need to continue to learn from each other. So just about everything we do is in the form of a partnership. Whether we are undertaking research with colleagues from institutions abroad, helping to build capacity through training, or undertaking monitoring and evaluation projects, our approach is the same: to work as equal partners in trying to achieve all we can to strengthen HIV/AIDS prevention and care.

In the realm of disease, this pandemic is the greatest threat we've faced in modern history. The countries that have been most successful in addressing it have done so through partnerships between political leaders, on-the-ground health workers in the public and private sector, nongovernmental organizations, and the academic community. Each of these groups brings its own particular knowledge and skills to address this very grave and challenging problem.

Your center focuses on prevention of the disease. Do you think the prevention message is adequately understood in high-infection areas?

I've often heard it said that HIV prevention doesn't work. However, there's nothing farther from the truth. We have an enormous amount of knowledge and experience on how to prevent HIV. The problem is, we haven't yet brought to scale the knowledge that we have, and that is the greatest challenge we face right now. We need to better identify the resources – both financial and human – in order to do all that needs to be done in the realm of prevention. In particular, we need to focus on young people, who are just becoming sexually active, so they are aware of the risks they face in having sex and know how to adequately prevent themselves from becoming infected.

A related issue is encouraging people to come for testing, because if people know they are HIV positive, they are likely to be more careful about transmitting the infection, and at the same time, they are more likely to seek care for their disease. So a lot of our efforts today are focused on encouraging anyone at risk of HIV infection to be tested.

Where does the disease pose the greatest threat?

Sub-Saharan Africa bears the greatest burden of the disease right now. There, we need to provide antiretroviral drugs, and train the workforce on how to use these drugs, so people can be treated effectively. These drugs are not a cure, but they can prolong life, which is very important for people who want to earn enough income to provide for their families. Better treatment can also reduce the stigma associated with HIV infection. On the other hand, we know that 60 percent of the world's population lives in China, India, and Russia, and these countries are the next battleground in HIV prevention. We could have hundreds of millions of deaths over the next few decades if we do not adequately beef up our prevention efforts in those countries.

Do you think the international business community is contributing enough in the fight against AIDS?

In general, the business community as a whole hasn't done nearly enough in the fight against AIDS. One reason for this lack of engagement has been fear of being associated with the disease. But now, globally and in country after country, we are seeing the business community understanding the economic threat posed by the pandemic. So companies are slowly beginning to invest more in prevention programs, whether these are workplace prevention programs, youth prevention programs, or any other activities where they have a comparative advantage. The pharmaceutical industry was a bit slow off the mark in understanding the gravity of the crisis and reducing the price of antiretroviral drugs. But they have come a long way in the past five years in reducing prices, and now there's great hope that these drugs will be available to even the poorest populations of the world in the very near future. ●

A Race Against Time

An Interview with Dr. Bob Arnot, Journalist, New York

EDITORS' NOTE *The recipient of a bachelor of medical science degree from Dartmouth College and a medical degree from McGill University (Montreal), Bob Arnot began his medical career as the founder and chief of the Lake Placid Sports Medical Center, and proceeded to serve as national medical director of the National Emergency Service (1980-1984). Additionally a distinguished foreign correspondent, Arnot has reported extensively for U.S. news networks, and served as special foreign correspondent and chief medical editor for NBC news. The author of 10 books and a veteran lecturer, Arnot also serves on the board of directors of Save The Children and the U.N. refugee agency, UNHCR.*

Dr. Bob Arnot

You recently returned from a trip to Africa. What was the rationale behind that trip, and how did you respond to what you saw?

I go to Africa three or four times a year. In September and October, I was in the Darfur region of Sudan, covering the civil war there. This latest trip was focused on a race against time for the 400,000 African children who die each year from HIV. You hear a great deal about treating adults, but little about children. They die in huge numbers. They are last in everything when it comes to treatment.

This trip was different from my other trips because it was the first time that I saw not only a great deal of hope, but also some real, hard benefits coming from clinical research initiatives. I saw some real wins on the prevention side and on the treatment side, too. If this progress could be expanded to the rest of the continent, we might at last approach the beginning of the end of this crisis.

There were a couple of projects that I was particularly impressed with. One was focused on the prevention of transmission from mother to child in Swaziland, funded by Bristol-Myers Squibb's Secure the Future program. What impressed me so much about this project was that the women who were benefiting would ordinarily be relegated to the bottom rung of any society. They were infected with HIV and pregnant, and often they were single mothers as well. You would expect them to be total outcasts. However, these women were treated like gold by the health workers, and the program was achieving better-than-average results. Specifically, we would expect 35 percent of untreated mothers to transmit the virus to their children. Among treated mothers, you would expect 5 percent to transmit the virus. In this program, transmission rates were getting down toward 3 percent. The program also emphasizes the health of the mother so that both mother and child survive.

Another project that really impressed me was the delivery of antiretroviral therapy in remote settings, where there isn't much in the way of medical infrastructure. I visited a town in a very remote part of Botswana, which took eight hours to drive to. The people there have almost nothing, in the way of resources; it's a very, very poor town. What I saw there was an extraordinary program that took traditional African culture and used it to build buddy systems and, indeed, a whole infrastructure to support HIV/AIDS patients.

In places where there are tremendous resources, like New York, patients might get individual counseling and lots of testing. Here, they used tribal culture to provide the reinforcement and psychological support. So, for instance, a neighbor would volunteer to check whether a patient had taken his medicine. That neighbor might come over two or three times a day to see how the patient was doing and to see if there were any side effects to the drugs. Anything problematic would be brought to the attention of a physician, and the patient would be treated. The initial results of this approach have been very promising in terms of people taking antiretroviral drugs and benefiting from them.

Do you think the business community is doing enough to tackle this epidemic?

I was skeptical before I saw the program. I work with some tremendous relief agencies and frankly hadn't expected to see big business compete. I was totally blown away by how the Bristol-Myers Squibb Foundation had really listened to African governments and local NGOs. They supplied critical expertise. In particular, they took the lead on the most vital issue in all of Africa, treating children infected with HIV. They proved it could be done, built a center of excellence in Botswana, and now have the largest number of children undergoing treatment anywhere in the world. Everyone I talk to in the U.S. thinks these children have a very limited lifespan. What I found were bright, bubbly, energetic children. They are completely ordinary kids in every way.

I asked where the sick children were. The answer was astonishing. "There are none," Liz Lowenthal, M.D., a Baylor physician working in Botswana told me. With treatment these children are expected to complete high school and college and even get married and have children. This was all at the Secure the Future sponsored Botswana-Baylor Children's Center of Excellence in Gaborone.

I came back determined to help advocate treatment for these children. Part of this advocacy will be in a half-hour documentary on "The Children of Aids." I'm a huge believer that you lead through telling stories, which is what this documentary is intended to do. I want to develop an effective campaign to get treatment to many more children with HIV. They really are at the bottom of the agenda. Despite success stories like the Gaborone center, they still die in absolutely enormous numbers. We now know that they can be treated successfully. This picture completely flies in the face of the conventional wisdom about children and HIV/AIDS. I was impressed by the boldness and the success of this program, and by how it is being used as a blueprint for putting these children on the map and saving an entire generation of African children. ●