

SING FOR THE GOV'NOR: A CALL TO ADVOCACY FOR TROPICAL MEDICINE AND HYGIENE*

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Fellow Society members, distinguished guests, and friends. My sincere thanks to Scott Halstead for his generous introduction. Also, I thank the membership of the society for giving me the privilege to serve as President, for there is no honor greater than recognition by one's peers. I also wish to thank the U.S. Army for a wonderful career in medical research—but for the record let me say that my comments here today are my own as a Society member and do not reflect any official positions of the Army or any other agency of the U.S. government. And finally special thanks to Dr. Peter Weller, our Secretary-Treasurer who—as everyone knows—really runs our Society.

OPENING THOUGHTS

Before I begin my address, pause with me for a moment to consider: who are we, the members of the American Society of Tropical Medicine and Hygiene (ASTMH)? What is so distinctive about our membership? Perhaps we can find the answer by examining what motivates men and women to take up this particular line of work.

It certainly isn't money. Sixty years ago, here in Baltimore, our President Richard Strong advised that "I know of no one who has acquired outstanding financial success through research in tropical medicine."¹ No argument here. Some may seek fame, but most—like our 1974 President Harold Brown—have only modest aspirations. He wrote that "I shall go down in history because a nematode is named after me that I found at autopsy in the rectum of a three toed sloth in Panama."² Others claim to be motivated by altruism, but in the 1990s even saints are not immune from "secondary gain" psychoanalysis. No, not money, fame, or altruism. I think Hans Zinsser had it right when he wrote (in his classic *Rats, Lice, and History*) that ours "is one of the few genuine adventures left in the world. . . . The dragons are all dead and the lance grows rusty in the corner. . . . About the only genuine sporting proposition that remains . . . this the war against these ferocious little fellow creatures, which lurk in the dark corners and stalk us in the bodies of rats and mice . . . which fly and crawl with insects, and waylay us in our food and drink and even in our love."³ Yes, this is the distinctive profile of a Tropical Medicine and Hygiene expert: modestly funded yet self-confident, dedicated yet adventuresome, an intellect with . . . a soul. And this is a society with a soul, whereas others are, well, just professional organizations.

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SING FOR THE GOVERNOR

Family legend has that my Grandfather—who emigrated from England to work in a Minnesota quarry—had a marvelous bass voice. A voice so clear, so resonant, that he was often asked to sing before dignitaries like the Governor. He would lay down his hammer, dust himself off, and sing so it moved the hearts of hard men.

Today, we live in an era of tight budgets and tight borders. Our leaders are experience-hardened men and women who must chart America's role in the post-Cold War world. The American Society of Tropical Medicine and Hygiene's position in this debate is unambiguous: our constitutionally-defined purpose is "the advancement of tropical medicine, hygiene, and related disciplines." World-wide epidemics of emerging microbes—HIV, cholera, drug-resistant malaria—have proven that the concept of a "global village" is no cliché. Even the hardest of men and women among us—when properly enlightened—can appreciate that national self-interest alone is a sufficient reason for a vigorous world-wide American medical presence.

Let me make my goal clear: in this presidential address I hope to inspire you to become an activist for tropical medicine and hygiene. I believe that this society can be an important voice in a chorus calling out for international cooperation and common purpose to address global health issues.

I will begin with a historical analysis—an ontogeny if you will—of the ASTMH. I will then consider some of the forces are shaping the future of tropical medicine and I will present some vexing data on how contemporary Americans see science and foreign policy. I will reflect on how we might wish to correct these public misperceptions, and conclude with some suggestions about how we might go about it.

ONTOGENY OF THE ASTMH

The American Society of Tropical Medicine (without the "Hygiene") was founded in 1903 in Philadelphia, not far from the Liberty Bell.⁴ Our first president, Thomas H. Fenton, was a professor of ophthalmology. He rallied the interest of colleagues at the University of Pennsylvania and the Jefferson Medical College, and 28 distinguished faculty—including 10 internists, seven surgeons of various specialties, four neurologists, three general practitioners, two pathologists, and two dermatologists—became charter members.

The group initially called itself "The Society of Tropical Medicine of Philadelphia" but settled on "The American Society of Tropical Medicine" when it adopted a charter. Professor Fenton explained that there were two reasons for forming the Society: "As is well known, there are many areas within the United States proper which are subtropical, and the new possessions of our country are almost or wholly

tropical. This would seem to make it necessary that the profession should give closer attention, perhaps, to what are considered tropical diseases.”

No misty-eyed humanitarianism here! These words of our founding father reveal only the cool pragmatism of national self-interest. Malaria and hookworm remained as serious public health problems in the southern United States, and the new U.S. possessions gained from the Spanish-American War—Puerto Rico, Cuba, and the Philippines—were ravaged by typhoid, yellow, and dengue fevers.

Fenton envisioned an academic, detached Society. He wrote “The society need not be a large one nor involve, by frequent meetings, too much tax upon the time of a busy practitioner.”

The first public meeting of the society was an invited address by James Carroll, then Surgeon General of the U.S. Army, on “The Etiology of Yellow Fever.” General Carroll, you may recall, had been a member of the epochal Walter Reed commission, and himself had only narrowly escaped death from self-inflicted yellow fever.

Membership in the Society grew steadily, and within a few years there were over 100 active members, all of whom were MDs. The first Ph.D. was elected to society membership in 1909. Reprints of papers presented at annual meetings and other public scientific meetings were bound and mailed to members. In 1918, the influenza epidemic was so severe—most members were either busy treating patients or ill themselves—that the annual meeting was canceled.

By 1920, membership in the ASTM was in decline, and President Henry Nichols candidly discussed the health of the Society: “A year ago I was told that the prognosis was bad. I began to feel that my only function might be to conduct a post-mortem, but it is evident that the patient is making a good recovery from the depressing influence of war and pestilence. . . . It may well be asked why a Society which has had among its recent presidents such leaders as Gorgas. . . Ashford, and Bass should ever be thought to be in a precarious condition. The answer is two-fold: First, the nature of our work; second, the prevailing state of national morale.”⁵

Nichols went on to discuss how the “national morale” influenced workers in tropical medicine: “individually we may and should have our own views, but our position as a Society should be in harmony with the national spirit. . . . At present, since our position as a nation is not yet clearly differentiated, we should do what is nearest at hand, namely, to begin with our efforts, like our charity, at home.”

I read a certain disappointment, a sadness, here. Nichols was speaking on April 26, 1920, only a few weeks after the U.S. Senate had rejected the treaty which would have made the U.S. a member of the League of Nations. President Woodrow Wilson, the father of American globalism and himself principal architect of the League, had failed in his effort to lead the country into progressive internationalism. Tropical medicine was not to be a national priority.

Nichols prescription for the Society’s malaise was a new Journal. He correctly predicted that a regular publication could promote cohesion to the Society and might even draw new members. Thus, the American Journal of Tropical Medicine, a bimonthly, was first published in January 1921.

Over the next two decades membership in the Society grew steadily, to over 500. During the 1930s, the American

Academy of Tropical Medicine, that conferred membership as an honor, was established, as was a new American Foundation for Tropical Medicine, a vehicle for raising funds and providing support for research in tropical medicine. Both these organizations were affiliated with, but independent from, the American Society of Tropical Medicine.⁶

The Second World War, fought in tropical theaters around the world, prompted substantial concerns about tropical diseases and fueled a rapid growth in Society membership. General Simmons, in his address on “Tropical Medicine and the Challenge of Global War” reported the staggering burden of tropical diseases on the U.S. Army during the war.⁷ The number of hospital admissions were malaria 460,000; dengue 84,000; sand fly fever 12,000; scrub typhus 7,000; filariasis 2,200; and schistosomiasis 1,600.

However, even before the end of the war, plans were being laid for an organization to preserve peace and advance human welfare. In 1944 Wilbur Sawyer of the Rockefeller Foundation wrote “War, which might be regarded as a highly virulent infectious disease of society, is now in the final stages of its greatest pandemic . . . each member [of the Society must] contribute to the thought and statesmanship which will be needed for setting up a suitable and acceptable world health organization. . . . We must . . . recognize that all nations are allies in the fight against disease, and that the failure of one is the failure of all.”⁸

The immediate post-war years prefigured the significant U.S. institutions of the second half of the twentieth century. 1946 was a particularly good year. Not only was it the year I was born, but the World Health Organization, the Centers for Disease Control, and the National Basketball Association were all established.

In 1947, George Strode, then President of the American Academy of Tropical Medicine, proposed fusion of the American Academy of Tropical Medicine, the American Society of Tropical Medicine, and the National Malaria Society. “Our numbers are small, our interests are closely allied. Why, then, do we not join forces?”⁹

In that same year of 1947, President of the National Malaria Society E. Harold Hinman also endorsed a formal association of societies. Let me digress here for a few moments to review the history of the National Malaria Society.^{10,11} This organization had been a prominent American public health organization since its inception as the National Committee for the Eradication of Malaria in 1916. Fred Hoffman, was the founder and distinguished honorary chairman of the national malaria committee for years. I was surprised to note that in his seminal 1916 paper “Plea for the Eradication of Malaria” Hoffman gave his professional title as “LL. D., Statistician, Prudential Insurance Company.”

This means that the founders of our two key parental societies—Professor Fenton of the Society of Tropical Medicine of Philadelphia and Mr. Hoffman of the National Committee for the Eradication of Malaria—were respectively an ophthalmologist and a lawyer. How strange! This is the stuff from which the ASTMH is made. It takes all kinds.

In his 1947 proposal to join forces, National Malaria Society President Hinman noted that malaria as a public health problem within the continental USA was about to disappear, and considered the options for his society.¹² He put forward the names “American Federation of Societies of Tropical

Medicine and Sanitation” or “American Federated Societies of Malaria and Tropical Diseases”. The proposal for a union was hardly radical; the National Malaria Society had held its annual meeting jointly with the American Society of Tropical Medicine for 16 straight years, every year from 1931 to 1946, always in a city in the southeastern section of the country.

Notwithstanding the long courtship, a committee was formed to study the idea. As you know, a committee can be defined as a blind alley down which good ideas are taken to be slowly strangled. Happily, this good idea survived, but it took four years before the First Annual Meeting of the new American Society of Tropical Medicine and Hygiene was finally held in 1952 in Galveston, Texas.

Society membership remained frozen at about 1,000 during the 1960s. As compared to the contained pragmatism of pre-WWII, Presidential addresses in the 1950s and 1960s reflect a growing sense of American responsibility for international health. As Tom Weller said in 1964, “the membership of [the Society] has a designated responsibility and primary interest in the welfare of the some two billion people now living in the tropical and subtropical regions of the world.”¹³

While some scientists cavalierly pronounced that the era of infectious diseases was over, members of this society remained acutely aware of, and concerned about, ongoing global health issues. In 1971, Bill Reeves presented a brilliant analysis entitled “Can the War to contain Infectious Diseases be Lost?” This paper should be required reading for everyone interested in emerging diseases.¹⁴

The war in Vietnam again refocused U.S. interest in tropical medicine as a short-term national security concern, and again Society membership grew rapidly, to 1,500.

Karl Johnson’s 1984 address on “Whither This House—or Wither” evoked eerie echoes of Henry Nichols’ 1920 “post-mortem” address. Just as Nichols had considered the “state of national morale” after WWI, Johnson reflected on “the impact of Vietnam on our culture.” He went on to ask “Has this society peaked?” Is it destined for a slow decline into musty and genteel obscurity?¹⁵ Johnson’s “cold water in the face” challenge stimulated a variety of wise management changes that had an invigorating effect on our Society.

Modern era Society Presidents have wrestled with the problem of how to squeeze maximum effectiveness out of our modest-sized Society. My esteemed predecessors in the 1990s have repeatedly stressed the importance of expanding the total U.S. effort in tropical disease control and obtaining the resources to do so.

John David challenged us to become citizen-scientists; Scott Halstead emphasized the applied “hygiene” term in our name; Don Krogstad urged the Society to speak out on important global issues; Dan Colley argued for integration of research and control efforts; Barney Cline advocated applied research directly in affected communities; and Carol Long emphasized interdisciplinary teamwork.

Is there a historical synthesis here? Yes. The fortunes of our Society during the 20th Century—the “American Century” if you prefer—have been swept along in the swirls and eddies of larger International events.

To recap: our precursor society was conceived in the aftermath of the Spanish American War, our Journal was cre-

ated in part as an answer to the isolationism after WWI, and our modern Society was founded immediately after WWII. Membership in our Society predictably surges during conflicts where U.S. national interests are perceived to be directly threatened by tropical diseases, then stagnates in the inevitable post-war national doldrums. The patterns are clear. It should come as no surprise that International Politics drives tropical medicine, and not the reverse.

FORCES THAT SHAPE THE FUTURE OF INTERNATIONAL HEALTH

What about the future? How does the end of the Cold War portend changes in American commitments to international health? I find myself reading the journal *Foreign Policy* as if it were Eldridge’s table of the tides: will the next season bring a spring tide or a neap tide? Historical precedent might suggest that smart betting money should go on a serious near-term ebb in tropical medicine, but I do not think so.

We all know that predicting can be a tricky business, especially when you try to predict the future. Nonetheless, it seems to me that in the 1990s a new galaxy of factors has come into alignment in a way that should raise—not lower—the prospects of tropical medicine and hygiene.

The first new factor is that the American public is now exceptionally aware of the risks posed by emerging diseases, largely due to an outburst of best-seller books and hit movies about catastrophic global pandemics. Major news weekly’s have run cover stories on emerging diseases. One of this year’s Pulitzer Prizes went to *Newsday*’s Laurie Garrett for her tropical disease reporting. However, it is the mass media of TV and movies that have had the greatest effect. For those of us in the know it is great sport to figure out which movie character is patterned on which Trop Med society member. There are some painful absurdities here, though. For example, the actor Dustin Hoffman (in “Outbreak”) was paid substantially more money for playing the movie role of virologist C. J. Peters than the real C. J. is paid for playing the real C. J. Even more ironic is the fact that the production budget for the single fictional movie “Outbreak” was greater than the entire U.S. national budget for study of real-life high containment pathogens. Regardless of these ironies, the fact remains that international health issues have been placed center-stage before the American public.

The second new factor that should engender support for tropical medicine is the spectacular increase in international communications. With this has come a marked increase in awareness by the American public of real international health crises. Communication satellites and global TV networks like CNN put displaced and ailing foreign faces on American TV every day. On an individual level, the internet now connects tropical medicine specialists world-wide. The internet bulletin board program for monitoring emerging diseases—“Promed”—has been called the CNN of epidemiology. This year we are establishing an ASTMH internet home page. I encourage you to cross reference it with your own sites.

Another new factor is the growing awareness that global health campaigns can be spectacularly successful. Smallpox eradication is often rightfully highlighted as one unprecedented success. Progress toward global polio eradication is another. And there are others, such as the global population

control effort, which have also succeeded magnificently. New United Nations figures, soon to be published, show that the world's population growth has slowed substantially more than expected. Brian Atwood, administrator of the U.S. Agency for International Development has said that: "The American people should feel proud of the contribution that their tax dollars have made in improving the lives of literally hundreds of millions of people around the world."¹⁶

The fourth new factor favoring tropical medicine and hygiene is a refreshing renaissance in progressive internationalism. As U.S. Senate minority leader Tom Daschle writes, "The imminent threat of nuclear war has passed . . . the doomsday clock has been set back from midnight. . . What is America's role in this new world, and is America equipped to assume it?"¹⁷

We have a new generation of political explorers like Václav Havel, President of the Czech Republic, and Al Gore, Vice President of the USA, who teach us to think in terms of the emerging Global Culture and who coax us to tackle transnational problems with a renewed sense of human responsibility.^{18,19} Men like these are not Utopian dreamers, they are political leaders who offer realistic long-term solutions to real global threats to our species.

Here the cynic is wont to quote an adage from H. L. Mencken, dean of Baltimore curmudgeons: "For every complicated problem there is one solution that is simple, obvious, . . . and wrong."

Of course, no one can be sure that progressive internationalism is the right prescription. But clearly this reasoned approach is preferable to—in Daschle's words—"protectionist and nativist sloganeering" offered up in "cheap applause lines."

PERCEPTIONS OF THE AMERICAN PUBLIC

History may not always repeat itself, but it usually rhymes. Can historical currents be mastered so as to avert a disastrous ebb in international health? A sound American foreign policy is possible only if it has the support of the American people. Survey data suggest that the American public is genuinely concerned about international health but is seriously misinformed about issues of vital importance to the ASTMH.

- Most Americans do rather poorly when quizzed on simple science questions.²⁰ Fewer than one in 10 can define a molecule, less than half know that the earliest humans did not live at the same time as dinosaurs, and only one in five can give a minimal definition of what DNA is. Humor columnist David Barry claims that most Americans think DNA stands for deoxy-antidiseestablishmentarianism.

- Most Americans think that the USA is already providing more than its share in foreign assistance. In a nation-wide survey last year by University of Maryland Program on International Policy Attitudes, when Americans were asked to estimate what portion of our national budget goes to foreign aid, the median estimate was 15%. This estimate is 15 times the actual amount of 1%.²¹

- In fact, total U.S. spending for all nonmilitary foreign assistance—including the UN and other organizations—has dropped by an astonishing 50% over the past decade, to \$18 billion, one percent of the federal budget. Instead of a world

leader, the U.S. is now the world's deadbeat: we are \$1.5 billion in arrears in dues to the UN. And most embarrassing, we are dead last among the 21 advanced nations in the fraction of our wealth that we allocate to foreign economic assistance.²² This from a country that is now spending \$400 million every year on abdominal exercise machines like "Ab Blaster."

Statistics like these lead one to agree with acerbic TV comedian Dennis Miller who observes that "The USA being the best country in the world is like being Valedictorian of a summer school class."

Although the U.S. public may be poorly informed about the facts, there is good reason to think that the public is much more supportive of scientific research and of foreign relations—two pillars of tropical medicine—than are its leaders.

Asked if science and technology "are making our lives healthier, easier, and more comfortable," a resounding 86% of Americans say yes. Forty percent of American adults describe themselves as very interested in science, and medical discoveries place top among their interests. Scores for public confidence in the people who "run" science and medicine, at 38% and 41%, respectively, were the highest of all fields surveyed, higher than education, industry, the military, the press, and organized religion.

Interest in and support for international relations also appear to be widespread in the United States. Two-thirds of Americans agree with the statement that "the world economy is so interconnected today that, in the long run, helping third world countries to develop is in the interest of the US."

The United Nations as an institution enjoys wide public backing as well. Mort Halperin, a former official in both Republican and Democratic administrations, in reviewing a report by the Council on Foreign Relations, recently declared, perhaps indelicately, that "The poll data all show that the UN has much stronger support in the United States than almost any other institution—considerably more, by the way, than the Congress or the Executive."²³

Madeline Albright, our representative to the UN, professes that Americans are concerned about global epidemics, crime, and terrorism and look for international solutions. Ambassador Albright says that "Of course there are people who will always object to the UN because they think it's a world government, which is nonsense."

ADVOCACY FOR SCIENCE, INTERNATIONALISM, AND TROPICAL MEDICINE AND HYGIENE

So we find ourselves at a crucial narrows, the end of the Cold War, with our course still uncharted. The tides of history threaten to carry us onto the sandbar of isolationism. The winds of public sentiment are favorable, and if harnessed, could easily propel us through to global cooperation and international health. But who will raise the sails? How can the American public and its leaders be made to know the facts?

Of course, we—the members of this Society—must accept a full measure of this responsibility. The challenge is clear: we must foster public understanding in the broad fields of science and internationalism and in particular we must

champion tropical medicine and hygiene. Noble aspirations, to be sure. Let us now consider how to go about it.

First, who can carry the message? I believe that every worker in tropical medicine and hygiene can be an effective advocate: students as well as professors; lieutenants as well as generals; clinicians, field workers, and molecular biologists. Every adventurer in this exciting calling of tropical medicine has had fascinating experiences. Look at the person sitting next to you right now. I will bet he or she can tell wonderful stories about scientific exploits in exotic settings. This room is packed with outstanding advocates.

What message do we want to convey? Of course, one important advocacy objective is increased funding for research in tropical medicine and hygiene. But the issues are larger than this. We must aim to win hearts and minds as well as research grants. We must strive to explain, in simple, clear, and understandable terms why science, internationalism, and tropical medicine are important for the future well being of humankind.

Can't we leave this kind of advocacy to the professionals? No. Neal Lane, Director of the National Science Foundation (NSF), criticizes the scientific community as an uncommunicative lot. He asserts that "the new definition of leadership in the science community must include a civic persona."²⁴

We should not be afraid to show our enthusiasm for our work. Louis Pasteur was fond of pointing out that the word "enthusiasm" is derived from Greek for "having a God within." Enthusiasm. Convincing communication is best done by a believer.

Who should be targeted? We in the ASTMH target most of our advocacy efforts on the U.S. Congress, particularly on appropriations committees. Our Legislative Task Force, now led by Stephanie Sagebiel and Mike Kemp, has done an excellent job in seeing to it that ASTMH members provide expert testimony on bills that impact on tropical medicine and hygiene. Our Capitol Hill consulting group, Capital Associates, is extremely helpful in this process. On broader issues, the ASTMH actively cooperates with other professional associations through umbrella advocacy groups like the National Council on International Health and Research America.

However, congressionally oriented advocacy is no longer enough. We must learn to take our messages directly to the public. In the NSF Director Lane's words, we need to "get out of our labs, off our campuses, and into a dialogue with the American people."

One simple way to do this is to talk about your work and your experience at a high school, a church group, or college club.

Last month I spent a morning with one hundred high school students and teachers in Ashland, Ohio discussing global emerging diseases. I was in Ashland to visit my parents. My brother-in-law, a biology teacher, arranged the session. It was great fun: the students were interested and enthusiastic—yes, you could feel it. I am under no illusions that this brief encounter altered world affairs, but I am convinced that there is now a fresh locus of globalism in America's Heartland. The Society's education committee—led by Steven Furlong—has launched a new initiative to work on curriculum development with high school biology teachers.

Hopefully this will help sow interest in teenagers around the country.

Each of us must decide how we can use our own particular advocacy skills. You may want to work with your local Rotarians, League of Women Voters, or Kiwanis Club, or join and lecture to a foreign affairs association. Write a letter to the editor of your newspaper. You could put up a web page with "cool trop med stuff" on it. You could help a journalist—another Pulitzer Prize Winner like Laurie Garrett—to get started, or better still, write your own stories and win a Pulitzer yourself! Dream up some creative ideas for our Society's 100th anniversary, like a PBS special. If you've got Hollywood aspirations—and connections—produce a pilot for a TV serial that features tropical medicine instead of "ER."

I can promise you that future leaders of this society will continue to represent our interests in structured political environments like the U.S. Congress. This is a crucial task, but I hope you will agree that another, deeper level of commitment is also needed.

I am sure that all of us—all 3,000 members of the ASTMH—believe that we should be reaching out to work with our developing country neighbors in the tropics, not withdrawing to our own shores. Our challenge is to educate U.S. society about how we can make the world a healthier and safer place for all. We must take every opportunity to promote understanding of global health and science to corporate America, to legislators, to executive leaders, and most importantly, to the American public. Reveal the soul that is tropical medicine and hygiene.

So, Society Member, every now and then lay down your hammer, dust yourself off, and go sing for the gov'nor!

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