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Opening Address: “Healthcare at the Intersection of Medicine, Technology, and Business”

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Dear Fellow Alumni, Dear Students,

Ladies and Gentlemen,

Dear Friends and Colleagues!

Good morning and welcome!

I want to introduce myself. I am Wolfgang Klietmann, President of the HBS Health Industry Alumni Association and Co-Chair of this conference.

I have the great pleasure and honor of opening the 9th Annual HBS Health Industry Alumni Conference, and welcome you here at the Joseph B. Martin Conference Center at Harvard Medical School.

As the newly elected President, I am proud to say that it is a privilege to serve in this capacity, and I thank you for setting your trust in me. I particularly want to express my gratitude to our Chairwoman, Bunny Ellerin, and to my predecessor, Bob DeNoble, both of whom I was most privileged to work with over the past nine years to build this Association.

I also want to thank those of you who made the commitment to attend the conference, and our speakers and panelists in particular. I thank my Co-Chairs David Greene and Jim Hummer and our support staff for their ideas and engagement. With gratitude I want to recognize our sponsors and their generosity in supporting the mission of this conference.

Our Association has had many accomplishments, and continues to grow stronger, but there is much we can do to help it reach its full potential. A healthcare forum such as this has never been more necessary, and it will have a bright future. As we focus on new opportunities to develop and expand our organization, we ask for the support of all of you, Fellow Alumni, to encourage the recruitment of new members, to participate in our events, to share with us your ideas, and to help launch new initiatives.

There are two priorities that we will be focusing on in the coming years. First, we want to strengthen our ties to our affiliated academic institutions, starting with our alma mater, HBS, according to our mission, as well as Harvard Medical School, and MIT, where our MD/PhD students study in the HST program.

As a reflection of these endeavors, we are privileged to have here the Dean of HMS, Jeff Flier, who will speak to us tonight, and Phillip A. Sharp, the Nobel Laureate from MIT, who will present a key-note address this morning. We welcome them both.

Our second priority is to strengthen our international network by recruiting more members from abroad, and by increasing the participation of speakers, panelists, and attendees from overseas. Currently, 11% of our membership are from abroad, which is a very positive number, but could be even better. We have succeeded in increasing this number in large part by developing a roster of speakers from a range of countries. This in turn has encouraged more scholars, businesspeople, and opinion leaders from abroad to attend our conferences and, in the case of alumni, to also join our Association. The advantage of increasing our international membership is clear, as doing so enriches the ongoing dialogue on key healthcare issues by bringing together different perspectives. While the specifics of the healthcare problems of other countries may be different from those in the U.S., our problems and their problems are rooted in the shared concerns of humanity. A dialogue on these problems can inspire new ideas.

It is also important to encourage more international membership in our association because the concerns of U.S. public policy and global health are inextricably linked. We need not look farther than the area of infectious diseases, especially HIV/AIDS or the influenza pandemic, to see how the problems of one corner of the world affect the others. There are emerging problems (such as MDR-TB) that know no political boundaries and require a global coordinated effort if we are to contain and eliminate them. It is also worth underscoring that the economic impact of global diseases such as HIV/AIDS or malaria hinders economic development and perpetuates poverty around the world, resulting in moral obligations and political problems that we cannot ignore. We are not isolated from the problems of other countries.

The global financial crisis has reminded us how a shock to one part of a system reverberates through all parts. The U.S. is the leader in the global healthcare industry, and Boston is the epicenter of the worldwide biotechnology industry, but this does not make us the center of the world. In this nexus, however, we feel acutely any changes to the mesh of global systems, whether they are negative, such as the financial crisis or political turmoil, or positive, such as new innovations in science or technology. As Thomas Friedman notes, the world is now flat, and it is imperative that we foster communication and cooperation across the worldwide market. The only risk here is in not doing so.

Our colleagues in the affiliated teaching hospitals, research institutions, and the cluster of the life sciences industry all have a stake in the healthcare arena. This is what unites us. Therefore we can find common ground through this forum for the healthcare debate. Our greatest assets in this endeavor are the amazing people at HBS, the Harvard Life Sciences and Medical community, and Harvard University as a whole.

The theme of our conference is **Medicine, Technology, and Business**. I would like to note, very briefly, some of the themes that connect the topics of our panel discussions in this conference.

First, what is technology? Technology is the practical expression of science. Technology has been and continues to be the main cultural driver of civilization. In this conference, when we speak of science, we are not usually speaking of science for the sake of science – that is, science for the sake of discovery – but science in the development of technology. In its technological manifestation, science has a major

responsibility. Every scientist must try to understand the implications of his or her work, whether they are practical, ethical, or moral in nature. At the same time, every government and every academic institution has a responsibility to not interfere with the scientist's efforts in this process of discovery, application, and understanding. At the government level, I hope that in the new Federal Administration, the interrelationship between science and policy is more positive, so that policy does not stifle science, but influences it by opening doors to innovation and collaboration. This would be a welcome change. At the level of the academic institution, it is here that I think that we may have some influence. But more on that in a minute.

One important technology that has led to the "flattening" of the world is the world-wide-web. The Internet has been instrumental in making our society more inclusive. It has lowered the barriers to participating in the dialogue on our shared problems.

In the spread of information, Gutenberg's invention of the printing press in 1501 was one important turning point. The development of the Internet is another. However, a few years from now, we may view the Internet in its present stage as incunabula, the equivalent of those handwritten manuscripts that preceded the more efficient printing press. The Internet is undergoing a deep change in the direction of a collaborative and connective intelligence. With the arrival of the web 2.0, the network has acquired a new quality: it has become interactive, providing new modes of information retrieval. We see the emergence of a 'swarm intelligence' that has characteristics similar to the phenomena that we observe in bee-hives. We can thus expect new forms of 'collective intelligence' that will impact our society and certainly healthcare in unpredictable ways.

The multitudes on the web enter into self-organized collaborations, producing new products and services that will compete with those of the leading industries dominating the market today. In healthcare, the impact of the emergent technology in e-health is quickly becoming clear. The public is now more aware than ever of what is happening in science. Patients are better informed of what is going on in medicine. Our challenge is to confront these developments and to engage in a dialogue to understand their implications. We as the stakeholders in healthcare have a responsibility to try to comprehend these changes, and work together collectively to influence their impact to benefit our society.

What kind of society do we have?

Edward O. Wilson, the Harvard biologist, gives us one answer. He describes our society as a "Star Wars society" with:

- STONE AGE EMOTIONS
- MEDIEVAL INSTITUTIONS
- and "STAR WARS" TECHNOLOGY

This combination of characteristics is somewhat dangerous, and underlies some of the current problems in healthcare and finance today. The only solution is to adapt our actions to the needs of our society. This responsibility for our society and the need to contribute to a greater good, to give direction, was an argument repeatedly brought up by speakers at the recent HBS GLOBAL BUSINESS SUMMIT as a

response to the financial crisis. We have to act as role models for a better society, and should fear the consequences of deviating from the course. We have to tell our collaborators where is ‘true north’.

Let us look at Medicine as an academic science. The scientific discoveries of the 19th and 20th century advanced medicine, elucidated the functioning of the human body and the causes of disease. This process introduced high-tech diagnostic and therapeutic applications that increased longevity and improved quality of life. However, the art of medicine and the art of healing have roots in folk medicine, religious, and cultural tenets dating back by millennia. When we take a comprehensive, and historical understanding of medicine, we see that it is a discipline that stretches across the

NATURAL SCIENCES – SOCIAL SCIENCES – and HUMANITIES.

Therefore the problems of medicine can only be fully resolved through a pluralistic and interdisciplinary dialogue. This dialogue must bridge cultures, and extend our academic inquiry into the areas of morality and religion. We see that this is especially the case with pressing questions around euthanasia, abortion, and stem cell research.

The interconnectedness of medicine across cultures, times, and disciplines must be respected. There is no better custodian for this task than a university, an organization that has successfully self-renewed over centuries and generations.

The last comment I will make involves the relationship between healthcare and business.

HBS under the leadership of Dean Jay Light has two priorities:

- HEALTHCARE
- GLOBAL BUSINESS

Our international Association’s agenda echoes these two priorities and therefore supports HBS in its goals.

In an era where medicine can deliver more than our societies are able or willing to afford, business leaders and politicians are challenged to master the complex administration of the healthcare system. This financial burden will exhaust the resources of governments and disrupt the traditional social contract between generations. However, there is hope, since our evolution has favored the survival of groups, not the individual. The morality that many believe is deeply embedded in our genes benefits groups rather than the individual. Darwin recognized morality as an offspring of this selective process. The financial crisis redefined leadership and reoriented it toward accountability, integrity, and responsibility for society. In her address at the HBS Centennial Summit Harvard’s President Drew Faust referred to leadership as a means to serve, to give direction and commitment to a group larger than oneself.

Whether in business, medicine, or technology, we need leadership, not rulers. We need leaders who serve and earn the trust and confidence of people.

In this Information Age, the leaders who will guide us through the current problems we face will not be those who make blind decisions, nor those who seek only to explore to the point that they find themselves lost in the wilderness. The leaders who will guide are those who are willing to engage in dialogue, to listen to dissenting voices, to allow themselves to be persuaded by evidence and argument, and yet to know when to stop, step back, and decisively set a course. As philosopher Immanuel Kant tells us: 'The need to decide weighs more than the ability to know'.

And so, you may want to think of your participation in this conference not just as an opportunity to learn, but also as an essential part of your role as current and future leaders in your respective fields. I thank you again and wish you an enjoyable conference.