White paper

Identifying critical societal Public Health Needs: in search of the public health paradigm for the 21st century

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"The challenge to public health at the beginning of the 21st century is as large as when public health was first developed and on a par to the first public health revolution in the 19th century."

Ilona Kickbusch Leavell Lecture WFPHA 2004

"The devastating inequities we see globally are man-made. The causes are social – so must be the solutions (...) Never before have we been so interconnected globally. Never before has a global movement for health equity been more necessary and more possible."

The Commission on Social Determinants of Health 2008

"Ours is the first generation with the means for many to know the world as a whole, identify global improvement systems, and seek to improve such systems. We are the first people to act via Internet with like-minded individuals around the world. We have the ability to connect the right ideas to resources and people to help address our global and local challenges."


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Something major has happened. Within the last decade the discussion of societal public health needs - health security, ageing, chronic diseases, inequality to name but a few - has again prominently entered the political domain. Approaches to public health are no longer discussed just in the technical and medical journals – they are part of the debates of government leaders, private entrepreneurs, military strategists, social innovators, trade negotiators and development advocates.

Public health today clearly is not just about what public health professionals do and what they know but concerns a much larger social and political enterprise. **Today public health is faced with one central challenge: how to harness collective action and innovation for health under much altered circumstances.** But the art of public health – the manifold organizational, social and political processes necessary to create healthier societies - has not been high on the agenda of public health training and education and has been neglected in public health practice. In part this is because of the natural time lag between the real world and educational institutions, but it is also due to the lack of priority given to this dimension of public health.

This is a gap that needs to be addressed urgently in order to make use of the unique window of opportunity (Kingdon, 1995) that has opened for 21st century public health: this paper argues that there is presently the potential that technical expertise, policy proposals and political action can come together despite or perhaps because of the present organisational fragmentation of public health. The myriad of health actors have the challenge and the opportunity to shape a “**plural compromise**” based on combining their diverse forms of power and legitimacy to create the new ethics, legal instruments, organisational mechanisms and professional competencies needed to respond adequately to the critical societal 21st century public health needs. Proposals from which to start out from exist. But urgency is required. There is no guarantee that this window will remain open, given other key challenges that we face in today’s world. But if it is missed public health will have failed in its mission.
1. The Seminal trends:

At the beginning of the 21st century societies throughout the world are challenged to develop a public health approach that responds to a new environment and new population health priorities. Three seminal societal trends impact health profoundly: the increasing interdependence and interconnectedness also referred to as globalization, the increasing influence and changing nature of the global market, also referred to as consumerism, and the extreme inequalities between nations and populations, in particular the plight of the bottom billion. Their interrelated effect is a defining feature of the emerging 21st century societal public health needs.

Today public health transcends the long established relationship between the responsibility of the citizen and his or her nation state circumscribed by both place and social contract, which has been the defining feature of public health development since the 18th century. The seminal trends frequently constitute three overlapping and mutually reinforcing circles, which means to some extent that the separation of the term public health from global public health is less and less relevant – all public health action should be considered in its national/local and global dimension, otherwise quite simply it is not doing its job. This follows Anne Marie Slaughter’s statement: Understanding ‘domestic’ issues in a regional or global context must become part of doing a good job. Increasingly, the optimal solution to these issues will depend on what is happening abroad, and the solutions to foreign issues, in corresponding measure, by what is happening at home” (Slaughter, 2004). This is why this paper uses the term 21st century public health, even if that use is not always yet fully justified for the phenomena addressed.

Public health in turn has also created seminal trends: the most important being the increased life and health expectancy in most countries of the world. Population ageing is already showing a major impact on how societies are organized, not only in richer countries where the proportion of older people is increasing and people are living longer than ever, but also in poorer countries where the speed and impact of population aging is now significant. In 2002, 70% of the world’s older people lived in developing countries (WHO, 2002).

Medical research and technological innovation is developing an extraordinary impact and speed and changing approaches to public health and medicine. As part of this development, health has become one of the most rapidly growing markets, expanding from pharmaceuticals to include for example nutrition, new health technologies, health information and new forms of health enhancement. Most importantly, people’s expectations are changing: increasingly throughout the world, health is no longer accepted as fate but is linked to human capability and societal responsibility. It has become part of a social reform agenda that now calls for a global health ethic, because increasingly this need for reform and responsibility is seen as being both national and global. In view of these trends some analysts even consider health in its many dimensions to be the next big driving force of social and technological innovation. (Illustration 1)

Illustration 1: Health as a seminal driving force.

Parallel to this development – and partly because of it - there has been a staggering increase in certain disease patterns: be it the growth of HIV/AIDS in parts of the developing
world, the increase in new and reemerging infectious diseases, or the rise of obesity and other chronic diseases in rich and poor countries. Many of the public health voices sound the same concern for a lack of political commitment to address these challenges but use different rationales to make their point, such as economic costs, loss of security and stability and global health ethics. For example, a recent Nordic Report states in relation to chronic diseases: “The consequences are staggering, considering the human, economic and welfare costs associated with premature deaths, treatment expenses and lost work and tax income” (NordForsk, 2007). UNAIDS (2006) argues, in relation to the spread of HIV/AIDS with a global perspective: “The countries most affected by HIV and AIDS will fail to achieve Millennium Development Goals to reduce poverty, hunger and childhood mortality, and countries whose development is already flagging because of HIV and AIDS will continue to weaken, potentially threatening social stability and national security, if the response does not increase.” Because many of the basic survival needs are still not being met, Gostin even states: “If it is correct that ameliorating the most common cause of disease, disability and premature death requires global solutions, the future is demoralizing.” (Gostin, 2008)

Illustration 2: Tensions in globalization

These multi-faceted dynamics between health as an outcome of a wide range of determinants and global flows and health as a major economic and social force create a range of tensions (Illustration 2) that will define its positioning over the next decades. It will challenge the way we think and act professionally in public health and in particular draw our attention to the political determinants of public health.
2. The fabric of public health action:

The dialectics of political power, knowledge and expertise is crucial to the historical analysis of public health. Societies address the question of population health within various theatres of power and more often than not, a pluralistic milieu containing elements of many of them.”

Dorothy Porter, 1994

2.1. The two strands of public health:

Public health action today has brought together a new and extraordinarily diverse group of actors with different forms of power and legitimacy which all aim to give it direction, sometimes to the despair of public health professionals – what (if anything) then holds them together? Does the present fragmented but crowded public health landscape represent the 21st century form – do we need to deplore it and aim to turn it into 19th or 20th century architecture or is the challenge to find new forms of 21st century governance that can deal with the fluid complexity (Fidler, 2007)? Is a new form of global governance already in place in the form of “market multilateralism” in which the private sector acts more like a state and governments and international organisations act more like companies? (Bull and MacNeil, 2006)

In order to better understand the characteristics of the emerging new form and the mindset which is intrinsically being shaped, it is useful to look back. Indeed, it is fascinating to ponder some of the similarities that emerge in periods of major social change – for example much of public health analysis tends to overemphasize the role of the state in initiating public health reform in “the golden age of public health” and neglects the role of many other social and political actors, of whom there was abundance. Sadly we still lack a comprehensive social, political and economic history of public health which would help to better understand the political determinants of health and their dynamic for achieving health. And – to our peril – we neglect teaching the history of public health in many schools of public health.

The history of public health indicates that the promotion and protection of the health of populations has not been a straightforward progression to better health and stronger institutions (Garrett, 2001). We see this clearly in view of the weak public health infrastructures in many countries – rich and poor – and in the lack of commitment to broad public health approaches in health development support to the poorest countries. We know, based on both historical and scientific evidence, which are the major determinants of health. Gostin has recently listed them again: “sanitation and sewage, pest control, clean air and water, tobacco reduction, diet and nutrition, essential medicines and vaccines, and functioning health systems for the prevention, detection and mitigation of disease and premature death.” (Gostin, 2008) They have been enshrined in the WHO Alma Ata Declaration of 1978 and reinforced by countless public health studies in all parts of the world. Innumerable economic studies have shown the link between poverty, economic development and health. The WHO Commission on the Social Determinants of Health has collected the scientific evidence yet once again. Evidently neither science nor experience suffices – otherwise we would not be faced with the scandalous health inequities between and within countries and in particular the tragedy of the “bottom billion” measured in differences in average life expectancy of up to forty years.

It is time to learn from public health history. It indicates that advances in public health were shaped only in part by the scientific and technological innovations and discoveries which conquered disease and are described in the “heroic” accounts of public health; rather they were driven forward by multiple and often contradictory forces and took very different organisational forms in different countries (Porter, 1994). George Rosen (1958), the great historian of public health, has defined the medical and technical development and the
social, political and economic factors as the two major strands in the fabric of public health, that constantly are woven together to produce new patterns. This understanding also lies at the base of the famous dictum by CEA Winslow that public health is both a science and an art. The political response to societal public health needs has been driven by economic utility, demographic concerns, political ideology, a fear of contagion, humanitarian commitment, medical discovery, a dedication to social reform and social justice – to name but a few. It has included the dark days of eugenics and the holocaust as well as various forms of social control through public health measures. Some approaches disappear, others continue to be of relevance or reappear in a new guise. And even today some of the most laudatory global health initiatives hint at 19th century colonial public health which sprang into action only when white lives were threatened – today we speak instead of national security interests. It is this strand of the social, political and economic factors that is the focus of this paper – because in the view of this author it is this strand that is needed in order to enable an imperative governance response to the societal public health needs of the early 21st century.

2.2. Public health rationales throughout recent history:

Health has always been intricately linked to how societies have been governed and organized and to the behaviours that are highly valued. A commitment to health of the population has frequently been interpreted as a sign of civilization and of good governance; witness the aqueducts of ancient Rome and Mohenjo-Daro or Thomas Jefferson’s statement that sick populations were a product of sick political systems. Today the World Bank’s good governance index indicates that countries in the lowest governance ranking are defined by poverty, ineffective health care systems, elevated HIV prevalence and significant international debt (Menon-Johansson, 2005), and poor health is clearly a defining factor of the populations of the bottom billion (Collier, 2008).

The good health of individuals has frequently been linked to their moral standing and has led to furious social debates as well as blinkered responses to public health which have in turn led to many unnecessary deaths – then as now. In 1904, during the building of the Panama Canal, it was the opinion of the leaders of the operation that “clean, healthy, moral Americans” would not contract yellow fever (Parker, 2008) – obviously they did, having no immunity whatsoever. And one hundred years later in 2008, public demonstrations are still necessary to draw attention to the discrimination against those living with the HIV virus on occasion of the 17th World AIDS Summit in Mexico City. Many of the millions who have died of AIDS since its discovery lost their lives because of prejudice, stigma and lack of a global health ethic.

Throughout the 18th and 19th century, public health developed as an integral part of the seminal restructuring of society. In particular it contributed to the consolidation of nation states, the building of local administrations and the creation of public sector organizations in an age defined by societal upheaval, industrialization and colonization. In the course of the 19th century – also based on the earlier mercantilist states - health became to be recognized as a factor contributing to economic growth, social stability and imperialist expansion – in consequence many early public health measures were deeply rooted in utilitarian political economy. This was not only the case in Europe and later the United States but also was a significant part of the Meiji Restoration in 19th century Japan, where, the political goal of "Rich Nation, Strong Military" made health an important object of governmental policy. The achievement of the goal required the production of healthy workers and soldiers and in consequence, a “medical policy” called for a national system of public health (Fukada, 1994).

Yet this focus on the economic and political value of improved health was not the only driving force for better health over the last two centuries, indeed some authors contend that it was much less so than we assume today (Porter, 1994). Much of public health action was driven by ideological aspirations, humanitarian and philanthropic passion and
moral and religious fervor. Then as today, this commitment to health as a value in its own right rather than a means to an end created some of the strongest impact. Health had become a rallying issue for social and political movements since the European Enlightenment and the French revolution had declared health to be one of the rights of man. Indeed health was part of the utopian vision of both the new citizen and the new society (Kickbusch, 2007). As such it stood symbolically in the center of modern enlightened governance. Health together with education was a key component of major secular philanthropic efforts to fight poverty, which advocated improving both the hygienic competence as well as the social and physical environment of the poor and the working class, of humanitarian organizations such as the Red Cross Movement; Finally health was part and parcel of moral and religious endeavors to fight the corrupting evils of the new society such as prostitution and alcoholism. Together, these forces for both an instrumental and an intrinsic value of health created the backdrop for major governmental responses and citizens entitlements as well as societal shifts in perspective and expectation in relation to health. In European welfare states, the social rights of citizens became as important a feature as their political rights – a balance that is now becoming an important part of the political debate in emerging economies.

2.3. A “defining moral ecology”:

The fragmentation of today clearly also existed then: yet the arguments and the actors frequently intersected and Hamlin (1994) draws attention to the many formal and informal coalitions that were formed in Great Britain to move 19th century public health forward in the context of social reform. The most critical defining historical feature of these different approaches was that they all concluded – albeit for different reasons and with different strategies – that public health was “do-able” and that it was the obligation of a civilized and modern society to stamp out disease. Medical research needed to be harnessed, action was needed in many sectors of society, poverty needed to be addressed, sewage systems needed to be built, money needed to be raised, citizens needed to act responsibly, employers needed to change their mindsets, politicians needed to be enlisted. Dorothy Parker calls this coming together a “defining moral ecology”.

Many of the early public health pioneers were active in the politics of the day – particularly at the local level - and were part of larger social reform movements; their understanding of public health action was embedded in their broad understanding of societal public health needs. For the most part they were not medical professionals, yet the most famous quote illustrating the necessary engagement in the social debates of the era comes from a pathologist. Rudolf Virchow was one of the leading German physicians in the 19th and early 20th century, who campaigned tirelessly for social reform and in a very practical manifestation of his commitment to public health served on the Berlin City Council. He stated: “Medicine is a social science, and politics is nothing else but medicine on a large scale. Medicine, as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution: the politician, the practical anthropologist, must find the means for their actual solution” (Ashton, 2006).

This is no different today. As in Virchow’s time, public health responses are shaped only in part by scientific innovations and technological solutions. They are driven forward - or stalled - by multiple forces that oscillate between utilitarian calculations, security considerations, ideological positions, humanitarian values and philanthropic engagement.

Illustration 3: The myriad public health actors
The complexities are reinforced by the fact that solutions which could still be addressed at the national level or within colonialist empires in the 19th century now require collective action at a global level as well as the involvement of a myriad of actors (Illustration 3). But there is now an urgency to build a “plural compromise” around the challenges of 21st century public health today: a “defining moral ecology” is emerging among all actors that it can and must be done, that it is both a necessary and the right thing to do. Even a decade ago this was not the case.

An illustrative case in point for a “plural compromise” are the many diverse forces that came together to advocate for the Bipartisan Legislation To Reauthorize PEPFAR To Combat Global HIV/AIDS - which now authorizes up to $48 billion to combat global HIV/AIDS, tuberculosis, and malaria, the largest commitment by any nation to combat a single disease in human history. The official statement on occasion of the signing into law by US President G.W. Bush makes arguments that not every global public health advocate would sign up to, as for example: “Spreading hope is in America’s security interests, because the only way our enemies can recruit people to their dark ideology is to exploit despair. It is also in our moral interests – because Americans believe that to whom much is given, much is required.” (The White House, 31st July 2008) Yet the plural compromise that was achieved will provide treatment for at least 3 million people; prevention of 12 million new infections; and care for 12 million people, including 5 million orphans and vulnerable children.

It must clearly be a major goal of 21st century public health to build such a plural compromise and use it to establish the normative foundations, legal instruments and institutional mechanisms needed to address the critical societal public health needs. In order to do this public health must turn significantly more attention to the second strand of George Rosen’s fabric of public health: the social, political and economic factors.

2.4. 21st Century Public Health Innovation: reinventing public health processes:

Social and policy innovations for public health aim to develop innovative policies, activities and services that meet a public health need, and are particularly characterized by engaging and mobilizing all sectors of society.

Social innovation has been defined as aiming “to develop innovative activities and services that meet a social need, and is particularly characterized by engaging and mobilizing all sectors of society” (Mulgan et al, 2007). Is the public health system and profession as defined today ready for this new world? There exist many proposals and efforts to move public health towards more innovation – both from within and from outside the public health sector - and many of them claim to be, or are defined as revolutionary. Lester Breslow (1999, 2004) classified the tectonic shifts in public health paradigms and practice as the first, second and third public health revolution, Fidler and Gostin (2007) consider the integration of the security and the public health realms a policy revolution and Alcazar (2008) speaks of a Copernican Revolution in health and foreign policy. The Ottawa Charter (1986) proclaimed “the new Public Health”, the European Union in 2008 has positioned a Health in All Policies approach at the center of its new health strategy (Commission of the European Communities, 2007), new public health textbooks present new approaches based on social determinants of health and sustainable development (Aday, 2005; Baum, 2008) and a large literature on the rise of the new multi actor governance system of global health describes and analyses the upheaval that has reshaped the global health world, including totally new financing mechanisms. New types of public health pioneers and organizations have emerged in the last two decades – highly committed, impatient with traditional structures, processes and financing mechanisms and willing to take risks. These innovators are social entrepreneurs of a
new type – reinventing public health practice by doing, particularly at the local and the global level, where there seems to be more policy space for innovation than within national systems. They have shown that a simple expansion of a traditional public health approach – for example with more funding - will not be sufficient. Today we frequently know the origins of disease – tobacco causes lung cancer; unprotected sex causes HIV Infection – down to the very last scientific detail, but are confronted with a plethora of interests, that make it difficult to accelerate public health action.

Such a systemic and fluid understanding of societal public health needs in the 21st century points to the requirement to reinvent public health processes. The more complex the systems the more reliable the pathways and rules have to be, the more open they are the more they need an accountable core. From such a perspective three critical interface arenas for innovative public health action emerge, all of which require political action in order to be successful:

- **The Interface global – local**: Public health can no longer be pursued just at the national level – its borderless nature requires a complementary approach of strong national and global institutions, mechanisms, instruments and funding, as well as commitments to both development and to global public goods;

- **The Interface technical excellence and political commitments**: public health can no longer be seen as a purely professional and technical endeavor – establishing its renewed ethical base is a political process that needs the strong voice and the support of civil society and of political and other leaders to address the equity, exclusion and human rights issues at stake.

There is consequently a clear need for improved and concerted public health leadership based on an understanding of public health as a global, multi disciplinary and multi stakeholder enterprise driven by science, social entrepreneurship and political action. But even this immense challenge is not sufficient. There is also a need to define the moral ecology, i.e. a global public health ethics in which this action can be grounded.

Jennifer Prah Ruger (2008) argues that “*the global health community has an ethical and moral responsibility to take positive actions to achieve health equity and should do so through global and domestic tools in law, policy and institutions*.”
3. The 21st century public health landscape

“We are in transition from what seemed a relatively stable, state-defined and structured world of international health to a diffuse political space of global health. We need to analyse to what extent the political ecosystem that inhabits this space transfers power and to whom. We need to map the epistemic communities and the multitude of networks and their spheres of influence.” (Kickbusch, 2003)

3.1. Expansion:

In order to fully grasp the changing nature of public health in the 21st century, we need to use different visualizations and metaphors. There are two defining features of the 21st century public health landscape: the first is the expansion and fluidity in terms of geography, of issues, of policy arenas and of actors – a compression in time and space. The second is the extreme exclusion of large populations from access to basic survival needs. Public health in the 21st century is by definition global and needs to manage the interdependence in health between domestic and foreign affairs, between states, and address development issues in a new and integrated manner. It is critically important to understand how intensely these two features are interrelated and how critical the cooperation of public health communities that have so far remained separate has become: the domestic public health professionals and those committed to international health relations and to development. (Illustration 4) Only if this is overcome will we move towards more sustainable solutions.

Illustration 4: The action sphere of 21st century health

A 21st century public health perspective also helps overcome a simplistic separation of public health landscapes into developed and developing countries. There are overlapping realities: many of the 21st century public health problems are global and local at the same time, such as infectious disease threats or the obesity epidemic and need to be approached through networked and collective action at all levels of governance; some of the greatest health inequalities are now found in the rapidly emerging economies and need primarily to be addressed through national policies of redistribution, which in turn relate to their newly found position in the global marketplace; and the most extreme health needs are situated in countries “at the bottom” which need significant global political commitment to overcome their exclusion.

One way to address this challenge in the international community has been the acceptance of the Millennium development Goals in 2000. This was a big step forward and has led to a more concerted approach to development but – as Collier (2008) argues - our very way of conceptualizing development has become outdated. By 2015 – the date for the achievement of the Millennium Development Goals – most of the 5 billion poor people in the world will live in countries that are developing; indeed many of the goals will show progress precisely because of the rapid development in very populous countries such as India and China. The focus therefore needs to shift to about 50 countries with about one billion people “that are falling behind and sometimes falling apart”. They need a new approach that does not consider them country by country but as a joint global commitment. This is a central message for 21st century public health.

The success of 21st century public health will depend as much on collective global action as on domestic commitments: much of global public health begins at home. In consequence some countries such as Switzerland and the United Kingdom have developed national
global health strategies that bring together the players at the national level that are or should be involved in global health matters. They are facing the difficult challenge to advocate for a broad and inclusive understanding of public health and yet firmly anchor public health responsibilities within a complex organizational environment at all levels of governance. The modern-day process of globalization is associated with the emergence of a global market fed by the expansion and acceleration of exchanges of ideas, goods, technologies and the increased movement of people around the world. It is becoming indispensable to understand for 21st century public health how transnational companies with a high relevance for public health – such as food and nutrition – function or how the pharmaceutical companies manage the process of product innovation. But how many schools of public health encourage their students to read the financial press or do their internship in the private sector? It is of no surprise therefore that there are increasing warnings of both a “crisis in global health governance” and a “crisis in competency” in public health as well as increasing efforts to define the new governance challenges (Buse et al, forthcoming) and the new skills requirements. (IOM, 2003).

3.2. Healthscapes and Networks:

“The landscape of public health is “crowded with health problems” says Dr. Chan, the Director General of WHO. Most countries are not well prepared for this “crowding” of new challenges with complex determinants and the multi-actor responses which are necessary to combat both infectious and chronic diseases. In order to implement and innovate, the traditional public health system needs to move to new forms of governance and management which include and bind an increasing number of other players such as other governmental sectors, the private sector, foundations, academia, the non-governmental sector and civil society movements.

An understanding of the public health sector is required in order to engage a wide range of other sectors and players in contributing to population health. As health expands into a wide range of arenas, new professions enter the public health world such as social scientists, trade lawyers, economists, information specialists and many others. Public health actors now include other ministries such as trade, agriculture, finance, foreign affairs and education as well as parliamentarians, NGOs, private companies, research institutions and in developing countries foreign aid donors, regional and multilateral development banks, U.N. organizations, consultancy firms and philanthropy. From this emerges a radically new vision of public health where the “organized effort of society” is based on a systems approach – that implies network governance, complexity management, relationship building and open communications. The “crowding” of health challenges, their interface and the need for rapid response also imply new forms of learning and knowledge management. In view of the seminal trends and the characteristics of the new public health landscape, this paper discusses 21st century public health not so much in institutional and functional terms but as an amalgam of “healthscapes” or as networks.

a) The term “scapes” has been introduced by the anthropologist Arjun Appadurai (1996) to describe the major flows in the fluid and global world in which we live. He defines a variety of global “scapes”– ethnoscapes, mediascapes, technoscapes, finanscapes and ideoscapes which are more or less borderless and constantly in motion. All of these, of course, also influence health –mediascapes and tobacco advertising are a case in point.

Illustration 5: Global Scapes
Appadurai explains that the traditional spatial models and strategies do not suffice any more as events become spatially more extended and temporally accelerated. In this he argues in a similar vein to many sociologists who maintain that the “methodological nationalism” (Beck, 2007) that still defines much of our analysis stands in the way of fully understanding the new phenomena we have to deal with. In an interview, Appadurai provides some generic examples of what he means: “media flows across national boundaries that produce images of well-being that cannot be satisfied by national standards of living and consumer capabilities; flows of discourses of human rights which generate demands from work forces that are repressed by state violence which is backed by global arms flows; ideas about gender and modernity that circulate to create large female work forces at the same time that cross-national ideologies of "culture", "authenticity" and national honor create increasing pressures on just these working women to embody traditional virtues.”

This paper suggests to consider “healthscapes” as a useful intellectual construct of analysis to visualize some of the global and fluid phenomena we are faced with in 21st century public health, which increasingly has to deal with the flow of people, images, goods and services. Clearly much of the global health discourse – for example in relation to HIV/AIDS, avian flu or SARS, can be explained and analyzed in these terms. But healthscapes are also a helpful visualization of particular importance in relation to non-communicable diseases such as tobacco, obesity or alcohol. They can be both tangible and virtual: the geography –or healthscape- of chronic disease could consist of the density of fast food joints in relation to playgrounds within a certain physical area for example. Or it can mean the spread of virtual messages in relation to body image.

b) In a similar vein, understanding public health as a network – that is as an interconnected system that brings together various levels of governance, sectors and actors to improve health - can provide a helpful starting point. Such an expanded definition clarifies that 21st century public health action has to some extent become as borderless as the world we live in – functionally and geographically: it can no longer clearly delineate national and global public health action and it can no longer clearly delineate the borders of sectoral public health processes. Healthy public policies, global policy networks, public private partnerships, global alliances and advocacy networks, international law, as well as new financing mechanisms such as global funds are cases in point. In managing the health, equity and the security challenges facing a globalized world, public health is pressured to act in many policy realms simultaneously – trade, development, security, foreign policy, agriculture, education to name but a few – and to develop new synergistic mechanisms, instruments and processes for public health action.

Anne Marie Slaughter (2004) has underlined in her book “The New World Order” that the governance networks in the 21st century are based on regular and purposeful interaction that combines national and international activity. In a recent document this is underlined as follows: “Formal treaty-based institutions need the eyes and ears that can be provided by issue-based networks of national officials; those networks, in turn, can often benefit by creating one or more central nodes that provide a secretariat function. And networks of corporate and non-governmental actors can be connected as well. Taken together, a networked order can provide the global collaboration we need while preserving the national freedom we want.” (Ikenberry and Slaughter, 2006) This approach has been fully utilized in the formulation and implementation of the 2005 International Health Regulations – which now depends on a wide network of information and cooperation from many different sources. One example is the WHO Influenza Surveillance Network, another is the Global Outbreak Alert and Response Network established through the World Health Organization together with many partners. (Illustration 6)
3.3. Consumerism and 21st century determinants

In the boundary-less health landscape of the 21st century, policy innovations are called for that respond to the 21st century determinants of health. Health is increasingly being shaped by forces such as the speed of modern societies, globalization of markets, the increasing mobility and insecurity of individuals, energy expenditure, and concerns regarding risk and safety and the reach of the media. These forces cut across many of the acknowledged social, environmental and economic determinants of health. An approach to visualize the many determinants and their interaction was developed by The Well-being Project (n.d.), Scotland in a joint effort with members of the community (Illustration 8).

Illustration 8: Determinants of Health

The shift from the industrial society of the 19th and 20th centuries to the knowledge societies of the 21st century is a ground-breaking as was the shift from the agrarian to the industrial world – and they are similar in their deep impact on health, this increasing the need for innovation. The changes in our way of life are shaping our lifestyles and have created a situation where many of the patterns of everyday life, for example our eating and food shopping patterns, and new forms of social stratification, for

Illustration 6: Outbreak Alert and Response Network Asia

In tackling issues related to chronic disease a similar network picture emerges. As an example, it is useful to consider the connecting nodes illustrated below, which demonstrate the network governance needed to address obesity. (Illustration 7) The system moves left to right from international through national, regional and local action, it then moves further to the settings and the individual level. Within each column the wide array of actors and settings is mapped vertically. On the far right hand side we find the final outcome in terms of population health. Arrows indicate the interrelationships which are both horizontal and vertical and which constantly cross boundaries. This is a simple model – a brilliant much more detailed and complex version of such systems-based mapping can be found in the UK Foresight Programme (2007) report on Tackling Obesities.

Illustration 7: Public Health as a network: Obesity

The shift from the industrial society of the 19th and 20th centuries to the knowledge societies of the 21st century is a ground-breaking as was the shift from the agrarian to the industrial world – and they are similar in their deep impact on health, this increasing the need for innovation. The changes in our way of life are shaping our lifestyles and have created a situation where many of the patterns of everyday life, for example our eating and food shopping patterns, and new forms of social stratification, for
example new forms of social in- and exclusion, endanger our health. This means that we need to understand that the health challenges and the diseases that come with this change are of a larger societal, not an individual nature. Health challenges such as obesity are as much an expression of our way of life in the 21st century as cholera was of the newly urbanized industrial 19th century. Responses need to address many levels of governance simultaneously as well as argue for health in the face of strong ideological and financial interests. Policies must come to terms with the new forces that act to create or compromise health – they must respond to what has been called “the new personal health ecology” where the individuals are subject to a broad range of influences over which they have very little control. Just as cholera was symptomatic for all the dimensions of the rapid urbanization of the 19th century, obesity is the symbolic disease of our global consumer society.

Obesity, indicates the Foresight Report, is not only a disease, it is a “complex multi faceted system of determinants” and it makes the case “for the futility of isolated initiatives.” (UK Foresight Programme, 2007) Contrary to the public health problem of smoking there is not one enemy to pinpoint – the global tobacco industry – but a plethora of actors who fulfill many different functions in society. Only part of the risk pattern can be localized – e.g. the absence of playgrounds influences child obesity - other parts are part of global franchise networks of fast food, super market chains, marketing services, media and the list goes on. Both the problem and the solution are systemic. Obesity will be a test case for 21st century public health as was the introduction of water and sewage systems at the end of the 19th century. Such systemic challenges can only be resolved through great political commitment, willingness to innovate and social action – including social entrepreneurship - at all levels of society. This is why the concept of Health in All Policies has gained such prominence as an innovative approach to health governance (Kickbusch, 2008a).

Obesity is also illustrative of another major shift in 21st century health. Traditionally, public health was part of the social contract between the citizen and the state, – developed in different ways in different countries, in some cases more centrally, in others more decentrally managed. The new factor in 21st century health is not only that industry has become a strong voice in public health, but that there has been a worrisome equation of the role of the citizen and the consumer, and in many cases the citizen’s right to health seems to suffer in the face of consumer rights to access goods and services. Benjamin Barber (2007) maintains that “A new cultural ethos is being forged that is intimately associated with global consumerism.” Part of the problem he draws attention to is that the market identity is cosmopolitan while the political and civic identity is increasingly parochial – a gap in democratic governance that many of the international Non governmental organizations are trying to address by advocating for global agreements on matters related to non-communicable diseases.
4. Strategic orientations of 21st century public health action

Public health is “what we, as a society, do collectively to assure the conditions in which people can be healthy” (IOM, 1988).

21st century public health is what we, as a society, do collectively at home and abroad – in local, national, regional and global arenas - to assure the conditions in which people can be healthy. The key challenge is to leverage innovative action for health in the many different areas of policy and society – this means challenging nearly every societal actor, sector and institution at all levels of governance. 21st century public health can best be described as a dynamic network, constantly creating nodes and synergies for health.

4.1. Refocusing the public health perspective:

the understanding and organization of public health is always a reflection of the contemporary social relations (Hamlin, 1994) A changing context usually leads to a reconsideration of the public health focus and the willingness to act politically. The most obvious recent example is the inclusion of health into the national security strategies of a number of nation states after the terrorist attacks of 9/11 and rapid response of ASEAN heads of state to the outbreak of SARS in 2003. Indeed the acceptance of the new International Health Regulations in 2005 was only made possible because of these events – the World Health Organization had unsuccessfully tried to convince its member states of the need for such a revision on public health grounds for over a decade.

As indicated in the introduction, three areas of refocus are of particularly relevance for 21st century public health: the interface between national (local) and global action; the interface between the many sectors and actors; and the interface between the two strands of public health, the technical and the political. With great simplification, we could say that for a significant period in the 19th century the focus of public health was national and political, then for the large part of the 20th century it moved to being national and technical, and later to being global and predominantly technical. It is now challenged to strengthen the political strand. We must also consider that this political action also has a new dimension: while in the 19th century the role of non governmental organizations was already an important feature of public health action, a historically new aspect is the role of a global industry of health-related products and services, which has catapulted the health agenda into the discussion of trade regimes, industry approaches to innovation and corporate responsibility. In connection with the two seminal trends of globalization and consumerism, this dynamic has led to a new characteristic of global governance defined as “market multilateralism”, the constitution and increase of private-public partnership, increasing forms of corporate social responsibility, and the formulation of innovative global health law – such as the Framework Convention on Tobacco Control.

There is no lack of proposals of how to address 21st century health challenges – to use Dorothy Porter’s term – in the various theatres of power: the state actors such as the G8 frame them differently from the non state actors such as the People’s Health Movement or the food industry. But it is imperative to underline the significance of the fact that health is now discussed in so many places at so many levels. The multitude of activities and players also constitute a process of learning and trial and error: the goal is to find a new balance between national and global, collective and individual, state and market responsibilities for health, and to address the role and accountability of the many actors in the health arena and beyond. In our analyses, we sometimes forget just how recent this development is – and how short-lived it could prove to be. Fidler (2008a) draws attention to the fact that it was a series of health crises that led to the increased interest in global...
health law, because the existing instruments did not work any more. But once they seem resolved or once other crises – such as the environment, energy or food – gain the attention of policy makers, health could drop off the agenda without having resolved the major governance challenges.

We must learn to understand that a plural compromise does not mean that everyone agrees – indeed it is exactly the constant tension between the utilitarian and intrinsic nature of health and the tension between the national interest and the need for collective action that will keep health on the agenda. The key strategic goal must be to constantly muster all four orientations to meet at critical points for agreements in relation to concrete long term governance innovations. (Illustration 9)

Illustration 9: the Plural compromise

In view of these developments, a broad and inclusive definition of public health makes practical sense: “what we, as a society, do collectively to assure the conditions in which people can be healthy” (IOM, 1988), and that is why global health diplomacy as the mechanism to gain the compromise is gaining in importance. (Kickbusch et al, 2007).

4.2. A closer look at the landscape:

A key principle of diplomacy is “know thy enemy” or at least the interests of the representative on the other side of the negotiation table, and probably even more so if one is not talking, as is the case with public health representatives and the tobacco industry. In order to navigate the busy landscape of 21st century public health and to assess the intentions of the various players, it is essential to try and differentiate their position as they clearly frame and prioritize critical societal public health needs from widely different perspectives.

Some helpful conceptualizations have emerged that can provide guidance in developing a strategic response to the societal public health needs of the 21st century. This author has on one occasion suggested that there are three dominant frameworks one needs to consider when developing a strategic approach to global public health: national and security interests, domestic and global economic development, and international human rights (Kickbusch, 2003). The first is very much linked to nation state interests, the second to the interest of the private sector and a range of charity-based and development approaches and the third very much to non governmental actors. It is also of high relevance to analyze the actors according to the form of legitimacy they have or claim and the forms of power that they represent – these have been explained in more detail in another recent paper by the author (Kickbusch, 2008a) and are summarized in Illustration 10. Particularly when aiming to move towards a plural compromise, it is essential that many different forms of power and legitimacy are brought together.

Illustration 10: Forms of power and legitimacy
Stuckler and McKee (2008) have recently summarized five metaphors that can be applied to global health (Illustration 11). These are: global health as foreign policy, global health as security, global health as charity, global health as investment, and global health as public health. They rightly contend that the policies that will be pursued crucially depend on which metaphor is dominant.

They also draw attention to the fact – as has been argued in this paper – that in practice, policy making rarely follows just one of these strategies and the end result is typically a mix of intentions. Stuckler and McKee contend that “Different actors push for different goals, often without making explicit which metaphor they are using, so that the end result is a mix of contradictory policies.” That is not necessarily always the case if one accepts that a certain amount of plural compromise is possible and at present probably the only way forward - again the PEPFAR 2008 Bill is an excellent example-, but this feature is certainly a key defining factor of the present fragmentation in global public health. They too underline the need for public health to become more versant in relation to the dominant metaphors of security, foreign policy, charity and investment. But their analysis misses at least two major metaphors or frameworks which are usually at the opposite ends of the political spectrum: health as a market and health as social justice. In doing so, Stuckler and McKee have neglected two of the most important driving forces of the 21st century health agenda.

4.3. Intellectual frameworks and healthscapes:

In view of the need to understand better the political dimensions of the landscape, it can also be helpful to go yet one level deeper to look not only at the metaphors but at the driving intellectual frameworks – and to some extent ideologies – that are reflected in the positions of the key actors. Both the utilitarian and the intrinsic arguments have gained ground in 21st century public health discourse and have found their expression in three different types of economism related to global health governance. (Mathew Sparke 2008) In the following, the author of this paper uses some of his key classifications to describe different “healthscapes,” following his argument that each of these types assumes and activates a distinct ‘imaginative geography’ that visualizes the terrain of global health in a distinct way.

a) The market healthscape sees the world as borderless and flat. Good health depends on good growth and poor health is a key result of poor integration into the global economy. In the last 20 years, the process of health sector reforms that took place around the world has given a prominent place to market mechanisms in the provision of health services, with an increase in services provided for cash income and/or profit, and the financing of health

**Illustration 11: Global Health Metaphors**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Selected goals</th>
<th>Priority diseases</th>
<th>Key Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global health as foreign policy</td>
<td>Trade, alliances, democracy, economic growth, reputation, stabilise or destabilise countries</td>
<td>Infectious diseases, HIV/AIDS</td>
<td>US State Department, USAID, President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>Global health as security</td>
<td>Combat bioterror, infectious diseases, and drug resistance</td>
<td>Avian influenza, severe acute respiratory syndrome, multi-drug resistant tuberculosis, AIDS</td>
<td>US Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>Global health as charity</td>
<td>Fight absolute poverty</td>
<td>Famine or malnutrition, HIV/AIDS, tuberculosis, malaria, rare diseases</td>
<td>Bill &amp; Melinda Gates Foundation, other philanthropic bodies</td>
</tr>
<tr>
<td>Global health as investment</td>
<td>Maximise economic development</td>
<td>HIV/AIDS, malaria</td>
<td>World Bank and International Monetary Fund, International Labour Organization, private sector</td>
</tr>
<tr>
<td>Global health as public health</td>
<td>Maximise health effect</td>
<td>Worldwide burden of disease</td>
<td>WHO, vertical disease-specific non-governmental organisations</td>
</tr>
</tbody>
</table>
through individual cash payments and health insurance. Multinational companies are increasingly involved in the health market, whether for the development of new technologies for health or the provision of health care. Indeed the health care sector is among the most rapidly growing sectors in the global economy. In 2002, it generated 3 trillion dollars a year in countries of the OECD alone. China and India have both recently announced increase in their health budgets of 25% and 15%, respectively, in particular for health programs for the rural poor and to support health reform and development of health care (MFGI, undated; Embassy of PRC in the US, 2008). Countries such as Brazil and Mexico have also expanded their systems. In Brazil in particular, the National Health Plan approved in 2004 provides explicit guidelines for reorganization, improvement of quality, access, financing and response capacity among others, with a special mention for the reduction on inequalities (PAHO, 2007). According to the World Bank (2006) health expenditure is expected to rise over the next 20 years by 14 percent in Europe and Central Asia, 45 percent in South Asia, 47 percent in Latin America and the Caribbean, 52 percent in Sub-Saharan Africa and 62 percent in the Middle East and North Africa. The major phenomena that contribute to this growth include the cross-border delivery of health services, the movement of personnel and consumers, direct foreign investments in health services such as clinics, hospitals, or laboratories, and cross-border delivery of health care as well as internet based sales of medicines.

In the EU for instance, the free movement of goods and people has led the European Commission to clarify its legislation on cross-border health care, as patients increasingly cross borders to find higher-quality, cheaper or elsewhere unavailable services (Kyprianou, 2007). This growth is also a unique opportunity for emerging economies - India, Indonesia, Nepal, Sri Lanka and Thailand have largely opened up to foreign investment in health care (Chanda, 2002). An example is that of a major hospital chain based in India, Apollo Hospitals, which is now the third largest private health care provider in the world. India and Brazil are also key producers of generic medicines. Health care provision has become a competitive market, for which countries compete. Banks are hiring specialists to put together health funds for their investors. The health and wellness industry in particular has been evaluated by one author as a $200 billion market in the United States, most revenues coming from vitamin sales and health club memberships (Pilzer, 2002). In August 2008 the Nestle Company announced an unprecedented 9.8% growth rate for the first quarter: Paul Bulcke, CEO of Nestlé: "The strong start to the year reflects Nestlé’s momentum as the world’s leading nutrition, health and wellness company. On the basis of this high-quality growth, with a good balance between real internal growth and pricing, I am confident that we will achieve our 2008 targets: organic growth approaching the 2007 level together with improved EBIT margins in constant currencies." (Nestle, 2008)

Based on its premise that ideally markets are the best solution to most problems of this world, this school of thought is increasingly concerned with market solutions for health systems and their efficiency, the growth of health consumer markets and the contribution of health to human capital. It is in this healthscape that many of the big transnational economic players in global health reside - many public health advocates are not fully aware just how big and diverse this global health market is and how rapidly it is growing, particularly in the emerging economies. This is the landscape of major trade negotiations, global investments in hospital systems and markets for health consumer goods – and while it maintains to be borderless it clearly excludes the bottom billion, who have neither access to markets nor to health. Understanding this healthscape goes far beyond ideological critique – it is a key political challenge for public health in view of the definition of health as a public or a private good and the role and accountability of the private sector in 21st century health.

b) The healthscape of investment and charity: it is here that most of the global public health actors reside, in particular the development agencies but also the global health foundations and to some extent the United Nations Agencies. The more they need to be result based the more they base much of their
thinking on the analysis of the WHO’s Commission on Macroeconomics and Health – chaired by the economist Jeffrey Sachs (CMH, 2001). It calculated that countries with the weakest health and education find it much more difficult to achieve sustained growth – they are in a poverty trap. The access to global markets- the route out of the poverty trap - is only possible if the poor are healthy. “To break this vicious cycle, the rich countries would have to help” (Sachs, 2004). Even though it speaks in global terms this approach is usually place bound – identifying pathological places or groups of populations – and its major instrument is foreign aid and philanthropy.

Because disease has such a heavy impact on economic development, the Commission declares that investment in health is an important component of a country’s development strategy and that large gains against diseases can be achieved by investing more money in essential health services. This scaled-up response requires not only a major increase in funding for health, but also a strong commitment by governments and the international community for specific actions. Initially this approach has galvanized many global health actors, especially many of the new philanthropic “investors” in the global public health marketplace and has led to interesting new approaches to combine the market mechanisms with the charity-based approaches. A typical example for a 21st century public health approach and innovation is to use the international capital markets to put large sums of money into immunization programs for the world’s poorest nations (Halliday, 1999; Hunt, 2004).

This is the approach that sits best with traditional disease and programme based public health thinking – allowing for the mix of public health and medical expertise, the wish to do good and a resounding economic investment argument to be implemented together with the development agencies and large foundations. It has perhaps best caught the imagination of many players being able to combine a commitment to do good with what seems a sound and pragmatic economic argument. It is full of innovation and social entrepreneurship for public health, predominantly in the area of infectious diseases; it has created new institutions and mechanisms and attracted major funding.

It is essential though for the future of 21st century health that public health advocates understand the deeper impact of this approach. As attractive as it is and as many individual lives that it has saved, it leads to the near total neglect of the second strand of George Rosen’s public health fabric: it depoliticises global health (Sparke, forthcoming) and neutralizes many of the issues at stake. Indeed, through the sheer strength of its force, it has contributed significantly to eclipse the political determinants of health, health systems based strategies and key instruments of global governance such as laws and charters. This is also a point Paul Collier (2008) makes in his book “The Bottom Billion”: the traps are not so much poverty but conflict, natural resources, bad neighbours and bad governance; the solutions in turn lie only very partially in foreign aid, much more so in laws and charters, trade policy and at times military intervention. These are all truly political issues. The notion of the “poverty trap” is in its systemic essence a charity based approach, a 21st century equivalent of the 19th century philanthropists before health became the entitlement of citizens. Laurie Garrett (2007) has stated this unequivocally: “In the current framework such as it is, improving global health means putting nations on the dole – a 20 billion annual charity programme.” This cannot be the principle on which 21st century public health advocates base their approaches. They must heed this warning and work to urgently redress this imbalance.

c) The inequalities healthscape: this is the healthscape of many non governmental organisations, many professional public health associations and academics. It is concerned with market failure and it maps the landscape of global health inequalities in relation to economic inequalities. Sparke (forthcoming) outlines how approaches consider economic inequality as a form of pathology, “it makes it possible to see the vast asymmetries that exist amidst global economic interdependencies while also enabling much more nuanced analyses of how local patterns of health and affliction are codetermined by political-
economic forces.” However Sparke makes a very important distinction: one can examine the health effects of inequality as an independent variable usually by comparing nation states, or one can conceptualize inequality as a symptom of more systemic economic processes that produce health vulnerabilities in and, just as importantly, across different spaces. The first approach remains within the constraints of methodological nationalism and - as many critics have pointed out – leads to the neglect of global confounding variables.

Recently therefore, more analysis has been attempted to address the global forces and flows that influence the patterns of health inequalities across spaces (Labonte et al, 2007). Paul Farmer argues in the best tradition of Rudolf Virchow: “Why would a group primarily concerned with the provision of health-care services write a book about economic policies? In a sense, the answer is simple: because the experiences of our patients, who for the most part live in poverty, have spurred us to do so. ... Even if we had balked at making the connection between economic policy and illness experience, our patients have been quick to point out these links ....Squatter settlements, refugee camps, and slums show to best advantage the physical vulnerability of the whole species, first experienced by the poor. They remain our mine-shaft canaries” (Farmer, 2003). In analysing the situation in Haiti, Farmer speaks of the “structural violence” which reflects asymmetries of power and need a very different type of analysis than the mapping of Gini coefficients. It also underlines that global public health must be concerned with these global landscapes, with the global flows and with the political determinants that produce them.

Somewhere between these two conceptualisations lies the most recent explanatory framework to identify the major health determinants at the beginning of the 21st century: the work of the WHO Commission on the Social Determinants of Health (see Illustration 12 figure below).

The framework of the CSDH identifies two major groups of social determinants of health: the structural determinants that generate social stratification and the intermediate determinants which emerge from the underlying social stratification and determine differences in exposure and vulnerability to health-compromising conditions (e.g. living and working conditions, housing, access to health

**Illustration 12: The social determinants of health**
care and education). The Commission organized nine knowledge networks – globalization, women and gender equity, social exclusion, employment conditions, early child development, urban settings, health systems, priority public health conditions, measurement and evidence – and tasked them to synthesize what is known in each of these areas and to provide guidance and examples of interventions that have been shown to be effective in achieving health equity. Each of these networks has now issued their recommendations and the CSDH has also produced its final report in draft form.

Typically these knowledge networks in turn produced conceptual frameworks for their respective areas which show the complex interface between the many factors of influence and the different levels of governance. All knowledge networks reinforce the message that most inequalities in health are avoidable and that in order to address them effectively, the solutions must rely on addressing the underlying societal causes, i.e. “the causes of the causes”. Any effective and sustainable solution to 21st century public health challenges must include action on the social health determinants (CSDH, 2007).

While the final recommendations of the CSDH Commission are not yet available, the implications of the model clearly point to George Rosen’s second strand of the 21st century health fabric: good global governance, market responsibility, fair financing, gender equity, decent work and universal health care to name some. The major social goal is to close the health equity gap in a generation. It will be important to see which policy and governance mechanisms the CSDH presents in its final report and how the member states of the World Health Organization and the wider global health community receive the report. Maybe it will be able to provide another additional component for moving towards a plural compromise.
5. 21st century public health and innovation: Consequences and response to the critical public health needs

Paradoxically, much of the decline in public health occurred during a period of significant global economic growth and an extraordinary expansion of public health knowledge and solutions - indicating that this neglect cannot simply be explained by lack of money or expertise but needs to be located in the realm of policy and politics. Today, in the face of global health inequities, the burden of infectious diseases in the poorest countries and the growing global pandemic of chronic disease in all countries, the calls for an integrated public health approach are getting louder. But this is not just a process between developed and developing countries, a distinction that has outlived its use. Increasingly, 21st century public health will be dependent on new geopolitical developments and includes the growing global role played by the emerging economies (BRICS) and increased South-South activities. Public health is more and more immersed in political and economic agendas of political and economic bodies such as the EU, the WTO, G8, ASEAN, NEPAD or OAS. The challenge for 21st century health is to become an active participant in the policy making process at all levels of governance through skillful leadership and partnership. While financing is critical, it has for too long been the priority focus of the advocacy effort in health – 21st century health activity must now strengthen George Rosen’s second strand, in particular it must focus its efforts on political determinants of health. It is critical, urgent and essential to build a political alliance for 21st century public health and to move towards an alternative paradigm of response to societal public health needs which aims to establish a historical plural compromise. This was possible when the World Health Organisation was founded; taking the commitments enshrined in this organization one step further seems appropriate now that 60 years have passed since its creation: the world now needs new forms of binding commitments that form the foundation for collective action and that provide a frame for the network-based health governance of the 21st century.

"Perhaps we are at a tipping point and it is time to take action” (Gostin, 2008)

Who should take action? On the one hand a coalition of the powerful players that have already made such a significant contribution to 21st century public health development under the paradigm of the poverty trap should aim to engage, this includes some of the major foundations, development actors and non governmental organisations. This would be the kind of innovative agenda that major foundations could take forward without a political and ideological basis. They would need to reach out to the influential political actors with proposals for strengthening the ethical, legal and organisational base of 21st century health. Such historic action could also be a focus for the emerging economies - both in terms of their contribution to shaping the 21st century health agenda – as they have already begun to do forcefully --, and in relation to their growing commitment to South – South cooperation..

From this analysis four key recommendations emerge that constitute the core proposals for a response to critical public health needs that emerge from the seminal trends of globalization, consumerism and unacceptable inequity:

• Strengthen the normative and ethical base of global health
• Strengthen and further develop the legal instruments necessary to ensure reliable governance
• create institutional mechanisms that enable a systemic approach
• build a strong public health leadership capacity with new competencies for public health professionals and advocates
5.1. Strengthen the normative and ethical base of 21st century health

a) Create a mechanism to define and strengthen the normative foundations of global health law: health in the lead

A 21st century public health agenda cannot be separated from a social justice agenda within and between countries, and all the more so for the most vulnerable populations, because many of the determinants of good health lie outside of the boundaries of the health system. The most conclusive discussion of the normative foundations of global health law and the need for a paradigm shift to a global health ethic comes from Jennifer Prah Ruger’s work (2008). She defines global health equity as the equal realization of individual health potential – it asserts a threshold or norm of health against which to measure gaps. She presents a set of normative principles and envisages global health law embedded in a framework of global health governance which includes both international and domestic law. Indeed a key characteristic is that global health law has the potential to create a new system that can reach out and affect domestic policies and law and employ national institutions to support the achievement of global health goals. This approach has some similar characteristics to the framework Convention Approach, described below. She characterizes her approach in a very similar manner to the arguments put forward in this paper: “It (the approach) views global health law not as a legally enforceable and coercively mandated set of rules forced upon states or as a component of any one country’s foreign policy or state interest, but as one of a collection of tools and processes for bringing together multiple transnational actors, both state and non state, through a global health system committed to shared governance and global health equity.”

b) Approach the problems of the bottom billion as a global public good: health as a partner

There are two aspects to the global public goods approach: global public goods related to interdependence and global public goods related to poverty and development. Much has been written about the first part of the equation in relation to health (Kaul and Faust, 2001). This includes for example particular mechanisms such as proposed in the International Health Regulations that ensure the surveillance and rapid response to disease outbreaks or is reflected in the discussions of ownership of patents and virus sharing.

An innovative and intersectoral proposal has been added by Paul Collier (2008): he suggests that the overwhelming problems of the bottom billion should be considered a global public good. He argues forcefully to move beyond “the poverty trap” approach to one of concerted policies by the international community. He suggests four key elements of such a strategy: that aid agencies should have a concerted long term approach to these environments, that regional bodies be committed to peace keeping, that a set of charters provide policy standards to guide action and a set of organizational mechanisms exist to promulgate the standards, finally he underlines that for these countries trade policy must become an instrument of development – an approach which requires support not only from the countries of the OECD but also from the emerging economies. Such a concerted policy approach needs policy coordination across government headed by a senior member of cabinet or the head of government. This is very much in line with the Health in All policies and addressing the determinants for health approaches that have been put forward. While health would not have the lead in such an approach it would be embedded in a political process that aims to affect serious governance shifts.

- R1: The development of such a mechanism could be a major project of the newly created “World Justice Forum” in cooperation with the Rockefeller Foundation and the World Federation of Public Health Associations.
5.2. **Strengthen and further develop the legal instruments necessary to ensure reliable governance**

*a) A Global Health Framework Convention: a constructive role for international law*

The idea of a Framework Convention on Global Health also takes its starting point to finding creative solutions to engage states, the private sectors, and civil society to find sustainable solutions for a healthier and longer life of the world’s population. In the context of this paper it is important to highlight that this proposal also takes its starting point from the need for a new model of governance: one that allows “more constructive and cooperative action to address one of the defining issues of our time.” Gostin (2008), who has developed this proposal in great detail, outlines the areas which the convention would cover as well as its key modalities; he proposes a protocol approach for the most important governance parameters similar to the Framework Convention on Tobacco Control (FCTC). It would present a historical shift which would express – as was argued in this paper – the plural compromise in global health. Indeed, the discussion of such a convention could lead to an expression of this consensus. Gostin himself makes the point that the strengths of such a Framework Convention Protocol approach would be to facilitate global consensus, facilitate a shared humanitarian instinct, build factual and scientific consensus, transcend shifts in political will and engage multiple stakeholders.

*b) Strengthen hard and soft law in global health governance*

In recent years, the debate on hard and soft law in global health governance has increased significantly and is gaining increasing attention. This is a reflection of the need for collective action for 21st century global health – irrespective of the driving intention, be it security, foreign policy, or public health. Increasingly for example the policy instruments available to the World Health organization based on its forward-looking constitution are being actively used by the member states. Fidler (2008b) has suggested that this development must also lead to a more systematic development of what he calls “Global Health Jurisprudence.” He too argues that the developments in 21st century health have forced a “radical rethinking of public health strategies and, consequently the policy and governance actions required to implement them.” The following graphs made available by the WHO summarize some of these developments succinctly:
The WHO Constitution describes a series of policy-making instruments available to WHO

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Examples</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventions and Agreements</td>
<td>Framework Convention on Tobacco Control</td>
<td>The first three are described in the functions of WHO, and the functions of the World Health Assembly, indicating the requirement for intergovernmental process.</td>
</tr>
<tr>
<td>Regulations</td>
<td>International Health Regulations (2005)</td>
<td>The first two are usually regarded as &quot;binding instruments&quot;</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Global strategy and plan of action on public health, innovation and intellectual property</td>
<td>The latter two are described in WHO functions, but not WHA functions, leaving the need for intergovernmental process optional (though Regulations may be adopted for Nomenclatures and Standards in accordance with Article 21).</td>
</tr>
<tr>
<td>Nomenclatures</td>
<td>International Nonproprietary Names</td>
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<td>Codex Alimentarius Commission</td>
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These developments reflect the increasing recognition of health as a global security threat exemplified through the International Health Regulations adopted in 2005, the concern with chronic disease and consumerism as exemplified in the Framework Convention on Tobacco Control, the increasing concerns with intellectual property and trade exemplified in the process following the Commission on Intellectual property, Innovation and Public Health and of course the human rights approach to health that developed in relation to the HIV/AIDS epidemic. All these efforts exemplify that a clear separation of national and international law is no longer possible and that 21st century public health law needs to address in particular the global/national (and frequently sub national and local) interfaces.

Fidler too sees the rise of global health jurisprudence as the result of a special plural compromise between instrumental and intrinsic orientations, but he also sounds a warning that the special power constellations that have made this possible and give health a prominence at this point might not prevail. What chance does global health jurisprudence have in a multipolar world? (Kickbusch, 2008a) Law, states Fidler clearly, is about "structuring power and authority to reach social ends and about designing the processes, through which such power an authority is organized." Because of this realization, an increasing number of legal instruments are being suggested in the international health arena both by countries – see Norway’s recent initiative for a code on marketing to children – and by non government organizations.

- R4: Public health professionals and advocates increasingly have to use and understand legal instruments and cooperate with new communities of interest. They are not always well prepared to do so. Legal professionals in turn need to become conversant in the 21st century health agenda – in short, the field of global health jurisprudence needs to be developed urgently. A series of academic partnership programmes in global health jurisprudence should be created – in order to broaden the competence base for this emerging field. Foundations and private sector actors should consider supporting chairs and academic exchange programmes as well as executive training in this area.
5. 3. Create institutional mechanisms that enable a systemic approach

A wide range of new organizational mechanisms have been introduced into 21st century health over the last decade, the most important surely being the public-private partnerships as well as organizations that reflect this partnership-based approach in their governance structure such as the Global Fund on AIDS, Tuberculosis and Malaria. New innovative financing mechanisms have also been introduced such as the International Finance Facility and the UNITAID. These have been presented and analyzed in many publications over the last years (Buse et al, forthcoming).

This paper wants to draw attention to two recent developments and proposals that are critical to establishing the plural compromise and to manage the major interface issues – both at global and national level.

a) manage the need for policy coherence and interface in 21st century health at national level

Countries are beginning to establish policy mechanisms to address the point of intersection between national and global health policy. Switzerland has been at the forefront of developing a national global health strategy – the Swiss Foreign Health Policy (2005), which is unique in documenting the interface between the protection of the health interests of the Swiss population and the improvement of the global health situation. In a paradigmatic way, it brings together three major strands of global health action that generally run in parallel with little coordination or even in competition: (i) the activities within the health sector that address normative health issues, international agreements and cooperation, and global outbreaks of disease and pandemics; (ii) the commitment to health in the context of assistance towards development; and (iii) the policy initiatives in other sectors — such as foreign policy and trade. In a similar vein but with a different approach, the UK Government has engaged in developing a Global Health Strategy which will be announced in September 2008. It also aims at greater coherence between government departments in matters of global health and develops a clear set of goals and action areas that involve most sectors of government.

The Minister of Foreign Affairs of Norway has launched The Global Health and Foreign Policy Initiative together with Brazil, France, Indonesia, Norway, Senegal, South Africa and Thailand (2007). Their joint statement in Oslo on 20 March 2007 underlines the urgent need to broaden the scope of foreign policy in an era of globalization and interdependence. They state a foreign policy revolution: "We believe that health as a foreign policy issue needs a stronger strategic focus on the international agenda. We have therefore agreed to make ‘impact on health’ a point of departure and a defining lens that each of our countries will use to examine key elements of foreign policy and development strategies, and to engage in a dialogue on how to deal with policy options from this perspective." Since then, the group has held meetings with foreign ministers around the globe as well as with senior UN officials and the UN secretary general in order to move this agenda forward and gain the support of other countries and key multilateral players. It seeks to widen the group along the lines of an open and loose coalition. Here the need for innovation in foreign policy meets the need for governance innovation in 21st century health. Slaughter (2004) has introduced the concepts of dual function and dual accountability which constitute a core feature of 21st century public health and need to be developed to a greater extent as both a political and legal concept.

- R5: Increased consideration needs to be given to such interface mechanisms at the national level, which allow the engagement of a broad range of partners both from within and outside of government. It also includes the development of concepts such as dual function and dual accountability (national and global and/or of different sectors). This fits well with the general development of Health in All Policy approaches that have been developed (Kickbusch, 2008b) to move many of the national 21st century public health issues forward. But – compared to the broad literature on health systems
reform - there is too little systematic documentation and policy analysis of such innovations. It needs to be undertaken as a key contribution to establishing the key managerial processes of 21st century public health and to become part of the training of public health professionals around the world. A first step could be the production of a Health in All Policies management handbook.

b) Manage the need for policy coherence and interface in 21st century health at the global level

Many authors agree that the policy coherence of 21st century public health needs to be addressed urgently. Not only because of the potential for fragmentation, competition and duplication, but also because of the lack of legitimacy and accountability of many of the major actors. International relation theory indicates that 'left to its own devices, a non polar world will become messier over time. Entropy dictates that systems consisting of a large number of actors tend towards greater randomness and disorder in the absence of external intervention' (Haas, 2008). A proposal to address this issue of fragmentation head on has recently been put forward and it suggests creating a Committee C of the World Health Assembly (WHA) as a concrete possibility to establish a transparent, accountable and democratic mechanism in which major non-state global health players engage in a dialogue with all nation-states (Silberschmidt, Matheson and Kickbusch, 2008). It would create the global public space and the transparency needed for the new processes of governance. The WHA has the legitimacy to play a coordinating role based on its constitution but it has also already increased its role as informal broker and hub of a wide range of networks and partnerships in the last decade. By bringing the actors together within the WHA, another step towards concerted non polarity could be undertaken. This could also provide the first step towards discussing the normative foundations of global health, strengthening international health jurisprudence and binding a wide range of actors to jointly provide clearly defined global public goods for health.

c) give special attention to the interface of local and global health: the glocal

Urbanization has grown at an extremely high pace in low and middle-income countries in the second half of the 20th century, with Africa showing the highest rate of urban growth between 1975 and 2000. This process has been accompanied by the increase of poverty and the proliferation of slums, with impacts on the local governance, economy and environment. Urban settings present many differences linked to factors such as pollution, economic conditions, or social support services, and again there is no single solution to resolve the many public health issues linked to urbanization. Urban settings worldwide have a common need however: improving the life of urban dwellers. The challenges to meet that need are multiple and multilevel. Local health systems must drive the effort to improve the health of urban dwellers, particularly those living in slums, and their approach clearly has to be interdisciplinary, so as to address the many issues affecting urban life, such as increased circulation of diseases and emergence/reemergence of diseases; increased prevalence of non-communicable conditions due to more sedentary lifestyles and changes in diet; increased prevalence of mental health issues; high levels of environmental risks; and issues like violence.
Yet municipal action has to be linked to the national and global governance issues that drive urbanization, as well as the social determinants behind that process, and the so-called “glocal” effects are to be included in any strategy to reduce the effects of urbanization (CSDH, 2005).

• R7: The public health sector as well as non-govermental organizations have responded through many targeted programs aiming at improving the life of urban dwellers, for example through the empowerment of women, violence prevention, or the integration of services within movements like Healthy Cities or Local Agenda 21. A special focus of 21st century public health must be directed towards urban settings. A range of recommendations in this respect have been issued by the CSDH knowledge network and the WHO Kobe Center. Mayors are now some of the most influential politicians worldwide and the should be integrated into the 21st century public health effort.

5.4. build a strong public health leadership capacity with new competencies for public health professionals and advocates

Throughout this paper arguments have been put forward that 21st century public health needs new types of competencies. It has made a plea for the art of public health – George Rosen’s second strand – that comprises the manifold organizational, social and political processes necessary to create healthier societies, which has not been high on the agenda of public health training and education. New competencies are required to address the new public health challenges that arise from the changing nature of the world in the 21st century. The global shifts mentioned above are accompanied by a shift in the view of health. As public health encompasses transnational and global dimensions, many determinants of health need to be addressed at the interface between domestic and foreign policy and within an intersectoral and multi partner approach – not only in the rich countries, but also in the emerging economies and in particular the poorest countries.

a) strengthening of public health infrastructures

This implies a strengthening of public health infrastructures overall – in all countries of the world –, and international standards for such an infrastructure need to be agreed on through some of the mechanisms mentioned above. Only very recently has there been the realization that decades of neglect have left many countries without a public health infrastructure with the capacity to perform the core public health functions and without the diversified public health workforce that is able to deliver the broad range of public health services, and those professionals who have the competence to manage the new interfaces described in this paper. Many of the major donors are now confronted with the fact that their increased financial contribution to global health – for example providing medicines for the poorest – finds its limits in the lack of manpower and distribution channels on the ground, which in turn are linked to lack of sustainable health sector funding. In particular, the World Health Report 2006, “Working Together for Health” (WHO, 2006), drew attention to the human resource crisis that had emerged in both the developed and developing world. This crisis is reinforced by the global mobility of the health workforce which for many developing countries means a brain drain of significant magnitude.

• R8: As a matter of first priority, therefore, there needs to be a global movement and possible an agreement – maybe as part of the agreements sought in relation to the mobility of the international health workforce – to strengthen public health workforce – to strengthen public health workforce – to strengthen public health infrastructure including Institutes of Public Health and particularly to establish Schools of Public Health that work with a 21st century public health curriculum. An interesting approach has been
developed by the Public Health Foundation of India which is an autonomously governed public private partnership launched in 2006 which aims to build “a large-scale, uniquely designed, sustainable response to the severe short fall off public health professionals in India which is one of the root causes of India’s public health challenge” (PHFI, undated) and is now in the process of establishing seven schools of public health in India. International donors and foundations should build strong partnerships with countries (government, private sector and NGOs) to create similar foundations to make interdisciplinary education and training in 21st century public health a matter of urgency. The International Association of National Public Health Institutes already works in a similar way to strengthen global public health capacity.

### b) Adapt public health to the challenges of increased mobility of people, goods and services and the wide range of 21st century borderless public health challenges

Patterns of migration are constantly changing, as are patterns of trade and communication but they are now characterized by movements in all directions. Asia for instance presents increased movements of people intra-regionally, while Latin American emigrants now seem to be shifting towards Europe. At the same time, some major growing economies in Asia such as India, China or the Philippines are now experiencing “brain gain” or the return of newly-educated émigrés. Massive influx of populations displaced by war or disasters also pose great challenges for local public health systems, which must address issues ranging from communicable diseases and sanitation to mental health problems arising from violence and the trauma of involuntary displacement. There is urgent need for coordinated national and international action to deal with the movement of peoples, including the special case of the migration of health professionals. In a similar vein, public health infrastructures need to be more prepared for the impact of increased trade – safety of good and services for example – and the issues raised by possibilities of internet trade. International communications, for example cross border advertising, presents real challenges.

### c) Training social entrepreneurs for 21st century public health

Given the fluid nature of 21st century health and the increasing number of new challenges, it is important to include in the educational goals of schools of public health to train social entrepreneurs for health. The concept of entrepreneurship is closely linked to that of innovation. Innovation is, according to Drucker “the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service” (Drucker, 2006). As applied to social concerns, entrepreneurship can take several forms. Alvord et al (2003) identify three models of social enterprises, based on principles of market and social change. Firstly, some entrepreneurs have relied on bringing together commercial viability and social impact, by using business skills to create enterprises with a social purpose. An example of this model is a for-profit company using its profits to organize socially-oriented activities, or a non-profit creating a commercial branch to generate funds for its own activities. Secondly, social entrepreneurship may take the form of activities relying on innovations with an impact for social problems, but no special concern for economic viability in the strict business sense. In that case resources are mobilized strictly in response to the needs of the social problem. In the third model, social entrepreneurs are using small changes in the short term “to catalyze social transformation.” Characteristic of that model is the need for a constant stream of resources and the fact that small changes lead to durable shifts in the context where the problems initially arose. Many of the existing degrees in community development and in health promotion include those dimensions of social entrepreneurship. Catford defines this as
Social entrepreneurs combine street pragmatism with professional skills, visionary insights with pragmatism, an ethical fiber with tactical thrust. They see opportunities where others only see empty buildings, unemployable people and unvalued resources. They make markets work for people, not the other way around, and gain strength from a wide network of alliances. They can ‘boundary-ride’ between the various political rhetorics and social paradigms to enthuse all sectors of society” (Catford, 1998).

Some examples of this already exist in public health, mainly in the United States of America. The University of California, Berkeley School of Public Health’s Center for Entrepreneurship in International Health and Development has for mission to promote and disseminate the use of entrepreneurial methods to improve the health of families in developing countries. Its fundamental purpose is to use the skills and experience of local entrepreneurs as partners within financially sustainable systems (CEIHD, undated). Harvard University provides Catherine B. Reynolds Foundation fellowships in Social Entrepreneurship, also to public health students. Master’s degree students admitted into the fellowship program are expected to participate in a cross-disciplinary co-curricular program at the Center for Leadership at the Kennedy School of Government, which focuses on leadership development and social entrepreneurship. Case Western Reserve University runs the very first public health entrepreneurship program (PHEP) aiming at developing entrepreneurial skills in public health scientists, through a series of social entrepreneurship courses open to all students. The goal is for students to develop the skills to create and grow new ventures, either as entrepreneurs or “intrapreneurs” within existing organizations. Just recently, the Schwab Foundation and Ernst and Young announced the finalists for the 2008 Social Entrepreneurs Award for South Africa, in the context of the World Economic Forum. They include two entrepreneurs with activities linked to health, who reportedly have created sustainable organizations committed to creating social changes for the improvement of the lives of disadvantaged groups of population (Schwab Foundation, 2008).

Other innovation awards – such as by the journal Fast Company – also frequently include social entrepreneurs for health.

- R 10 Promoting social entrepreneurship in 21st century public health is critical for the future of public health and would constitute an interesting joint initiative between schools of public health, public policy and business, and schools of development. Those 21st century public health actors with an interest in public private partnerships and innovation should work to support such training initiatives and possibly joint degrees, particularly between public health and business schools, and particularly in countries of the South. Foundations and Partnerships could recognize such social entrepreneurs and make their experiences more widely known and accessible.

d). 21st Century Public Health as leadership, partnership building, alliance and stakeholder management, negotiation

Healthy public policy, as formulated in the Ottawa Charter (1986), was initially seen as focused on actions within government, just as multilateralism was seen as coordinating nation states. In both cases the increasing prevalence of non state actors – social movement, private sector companies, foundations and for profit organizations – has changed the world of national and global public health policies. This new global public domain needs to be understood and managed. Bull and McNeill (2006) have argued that in the international arena, states and private actor are increasingly linked through a new form of multilateralism, called “market multilateralism”, which has developed over the last 10 years. A wide range of partnerships developed: resource mobilization partnerships, research partnerships, advocacy partnerships, policy partnerships, or operational partnerships constitute more inclusive arenas for action. This presents a new management challenge for public health professionals who are usually
trained to manage government agencies rather than these flexible new types of organizations whose role ranges from advocacy to policy development to implementation. There are both new leadership and new brokerage roles to be played.

- **R 11:** Leadership, partnership building and network management – both vertical and horizontal, within and between countries, and with other actors will gain increasing importance in 21st century public health. It will constitute one of the central management skills of future public health professionals, no matter where their focus of work will lie – it is needed to create healthy communities as it is essential to reach international agreements. Schools of Public Health must step up to teaching the skills of 21st century health leadership, partnership building and network management.

- **R 12:** A small number of initiatives have been developed to improve skills in global health diplomacy and a network of training institutes is in preparation in a cooperative venture between The Institute of Graduate Studies of International and development Studies in Geneva and the World Health Organization. Initiatives to teach global health diplomacy are now under way in a number of countries including Switzerland, the USA, Brazil, Kenya and China. Close cooperation should be sought with Schools of Diplomacy and with schools that have developed environmental diplomacy to ensure interdisciplinary learning from the very beginning.

**e) Global Health Diplomacy**

Consultation, negotiation and coalition building are increasingly important in 21st century public health. As diplomacy is frequently referred to as the art and practice of conducting negotiations, the term ‘global health diplomacy’ aims to capture the multi-level and multi-actor negotiation processes that shape and manage the global policy environment for health (Kickbusch et al, 2007). In view of the significant power imbalance in the global system, mechanisms need to be put in place that allow the participants in these processes to engage with each other on a more level footing if not of power then of negotiating competence. It underlines the need to build capacity for global health diplomacy by training public health professionals and diplomats respectively and bringing them in contact with other global health players. Ideally, global health diplomacy results in three key outcomes: i) it helps to ensure better health security and population health outcomes for each of the countries involved (thus serving the national and the global interest), ii) it helps to improve the relations between states and strengthens the commitment of a wide range of actors to work to improve health and iii) it provides an understanding of health as a common endeavor, a human right, and a global public good with the goals to deliver results that are deemed fair. It lies very much at the basis of achieving many of the proposals and recommendations outlined above.

- **f) strengthen the health research agenda and support biomedical and technical innovation and change**

It seems appropriate to make at least one important reference to George Rosen’s first strand of public health in the context of competence development, even though it was not the focus of this paper. The importance of science and technology as a key part in 21st century public health must be recognized. The notorious “10/90 gap” illustrates that most research in biotechnologies takes place in most industrialized countries to address the needs of their population (Daar et al, 2002). Further, scientific knowledge, by essence a global public good and a strong driver for health achievements, faces many impediments to the sharing of its benefits. For instance, many countries still face the challenge of providing access to medicines and ensuring their quality and efficacy, partly due to the existence of intellectual property protection for pharmaceutical companies. While many essential medicines are off-patent, current major diseases such as HIV/AIDS or drug-resistant TB or malaria require access to on-patent, newly developed, more expensive
drugs. There is an urgent need to promote research based on local needs and apply a global perspective on research. A priority must be to find mechanisms to strengthen research capacity in developing countries.

Successful R&D in biotechnologies is not limited to the developed world anymore. Indeed, “innovating developing countries”, such as India, China, or South Africa have put in place successful research programs, often centered on local needs, in what has been termed the “second wave of globalization” taking place in the biomedical and IT industry (Thorsteinsdottir et al, 2004; Dossani and Kenney, 2007). Another challenge lies in the ethical dimension attached to that, as societal consensus on issues such as informed consent, disclosure or patient autonomy have not always been established (Merson, Black and Mills, 2006). The rise of genomics, for instance should not lead to any type of discrimination (IOM, 2003). Some countries are already working on these issues. China for example, another new heavyweight in the market for drug research and development, has put in place bioethics regulations, in conjunction with the European Union (Bionet, 2007).

R 13: Strengthening the health research agenda, in particular by applying a global perspective on research, is important. Applying principles of network governance to health research may help, but the public health sector must have the skills required for such a coordination. It must also ensure that research looks beyond the biomedical model and includes the study of the social and behavioral determinants of health. Most importantly, all research must translate into practice, a most challenging aspect that requires the development of new skills and strategies (Kickbusch and Payne, 2005). Increasing cooperation between the Global Forum on Health Research and key 21st century public health actors could be one way to take this agenda forward. New recommendations will emerge from the 2008 meeting of the GHF in Bamako.
**SUMMARY**

This author has on occasion of the World Federation of Public Health Associations Leavell Lecture in 2004 proposed five characteristics of a new global public health:

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<th>Characteristics of a new global public health</th>
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<td>• health as a global public good</td>
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<td>• health as a key component of collective human security</td>
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<tr>
<td>• health as a key factor of good global governance</td>
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<tr>
<td>• health as responsible business practice and social responsibility</td>
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<tr>
<td>• health as global citizenship based on human rights. (Kickbusch 2006)</td>
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At this point at the end of this paper, it seems critical to highlight the fifth characteristic: health is a right of global citizenship. It is a reflection of the shift of international law from the rights of states to the rights of individual and to a capabilities approach as has been developed by Amartya Sen and Martha Nussbaum and applied to health by Jennifer Prah Ruger (2008). It takes the individual as the central moral unit of justice: all individuals should have equal capability to be healthy. This is the premise of the work of the World Health Organization and enshrined in its constitution. It is particularly the dimensions of equity and rights that have been a strong driving force in the debates on globalization and consumerism – some author speak of a global ‘inter-human’ ethics that is taking shape (Buzan, 2004). It finds its expression in initiatives such as the ‘Make poverty history’ campaign, the Millennium Development Goals as well as the G8 concerns with health, criticized as not going far enough as they might be. The arguments for global public goods that address the other dimensions of globalization – the social, economic and cultural rights of people in a global world – are part of a larger political debate that reaches far beyond health.

The political power is shifting, as is the economic power – the recent DOHA rounds were are clear expression of this. A new geography of power has emerged which is very different from the short unilateral period following the collapse of Soviet Union. Presently, global health governance is being conducted in a non polar world, a context which provides a new dynamic for multilateral institutions, as they can strengthen their role as platforms and brokers between the myriads of actors as well as gain acceptance for strengthening international law for health. The emerging economies and new power centers are also increasingly using the existing institutions - such as the World Health Organization - to increase their own influence on global decision making for health. In 1945 at the San Fransico Conference, the Brazilian and the Chinese delegations argued that “medicine is one of the pillars of peace” and this in turn led to the proposal for a single health organization of the United Nations. These countries are today again two of the central players, they could again play a key role in moving global health governance to a new plane. There are also new players such as the European Union, which is slowly flexing its global muscle and exploring its role in 21st century health governance. The Bill and Melinda Gates Foundation will have an extent of resource based power that is new in the global health arena. New networks, such as Parliamentarians for Global Action, need to be identified and included. We do not yet know how these players will use their power and what priorities they will set. This author hopes that some of the proposals made in this paper will be picked up.

21st century public health has to move out of the charity mode. It must be firmly based in fundamental norms, legal frameworks and governance mechanisms that reflect the network governance and the multitude of actors. 'The very values of an enlightened and civilized society demand that privilege be replaced by generalized entitlements – if not ultimately by world citizenship then by citizens rights for all human beings of the world.' (Dahrendorf, 2002). This is the basis for an adequate response to the societal public health needs at the beginning of the 21st century. Global health governance should be geared towards helping reach such a goal. It is time for a San Francisco II Conference.
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