The Fiocruz experience in Global Health and Health Diplomacy capacity building: conceptual framework, curricular structure and first results

DOI: 10.3395/reciis.v4i1.355en

Abstract
Developing an International Health capability and training professionals to work with health at the international level have been concerns of the Fiocruz for over a decade. This process culminated in its setting up a Global Health and Health Diplomacy area in 2007 and embarking on other initiatives, including a postgraduate specialisation course. This paper examines the theoretical frames of reference that orient the human resource capacity building in Global Health and Health Diplomacy pursued by Sergio Arouca National School of Public Health (ENSP/Fiocruz) in collaboration with a number of internal and external partners. Following a brief conceptual review, which delimits these areas as new objects of study in collective health, the paper examines the central issue – relations between globalisation and health – that organises the content and presents the structure of the 1st Specialisation Course in Global Health and Health Diplomacy, given in 2008-2009, in Brasilia. It is concluded that, in spite of advances identified in the past decade, these fields are in need of greater conceptual refinement and development of sound analytical frameworks. Meanwhile, the impacts of globalisation processes on the health of populations also pose new challenges to international cooperation. In view of the priority given to health by current Brazilian foreign policy, there is still insufficient knowledge production and human resource capacity-building to address these new realities. Thence the importance of the investments being made.

Keywords
global health; health diplomacy; global public goods; global governance; capacity-building; Brazil

Global health and health diplomacy: definitions and concepts

In recent years the terms “global health”, “global public goods”, “global health governance” and “health diplomacy” have started to appear in political discourse, particularly in international technical documents and scientific literature, and have come to figure as new objects of study in collective health.

Bunyavanich and Walkup (2001) write that ‘global health’ has become a dominant phrase in international public health discourse (p.1556). There has also been a parallel increase
in the number of international courses, workshops, symposia and meetings to discuss “global health”.

Now what is meant by “global health”? What are “global public goods”? And what is the purpose of “global health governance” and “health diplomacy”?

The expression “global health” is often used as a substitute for the idea of “international health”, a term coined early in the last century (in 1913, in the USA, by the Rockefeller Foundation) and used until the 1990s to refer to health as a transnational phenomenon, but without regarding it as something to be addressed in the realm of international relations, i.e., relations among nation-states forming part of an inequitable, hierarchical world system (GODUE, 1992).

Kickbusch (2000, p.980-1) considers the World Health Organisation (WHO) to have “invented” the idea of “international health policy” in the late 1970s, more specifically with its strategies of “Health for All in 2000” and Primary Health Care (PHC) as formulated in 1978. With that strategy, the WHO spread not only the notion that nation-states are responsible for the health of their populations, but also that health should be thought of as interrelated with the economy, politics and human rights and also as produced by inter-sectoral actions. Although one may disagree as to the historical nexus of term’s “invention”, the correlation is relevant, because Alma Ata did in fact bring about a considerable shift towards conceiving health as the outcome of dynamics extending beyond the boundaries of the health sector itself, although the idea actually antedated the 1970s. Nonetheless, the WHO also signalled that attaining the goal of “Health for All” depended fundamentally on “international actions”.

On the other hand, historically, international cooperation to combat diseases has been a concern of – particularly European – states since the mid-19th century; and international conferences, instruments and mechanisms to expand and strengthen health cooperation has meant a dramatic transition in how health was conceptualised and approached internationally (FIDLER, 2004, p.1). This process culminated in the creation of the World Health Organisation (WHO) in 1948, together with the International Sanitary Regulations. Fidler regards these two initiatives together as constituting the first substantive set of processes, rules and institutions for global health governance (FIDLER, 2001, p.843).

Since then, the WHO and its branches have always addressed health issues from an international technical cooperation standpoint, even though the approach to fulfilling that mission has changed over the years (BROWN, 2006; FIDLER, 2004). Meanwhile, the Pan-American Health Organisation (PAHO), practically ever since it was founded, has endeavoured to delimit a specific field of practice and capacity-building in “international health” and, in the 1990s, this term consolidated with a more comprehensive meaning, although the name remained unchanged (PAHO, 1992). It was argued at the time that there was a need to reconsider the traditional conception of “international health”.

In 1992, Mario Rovere and Ulyssees Panisset were arguing, in view of internationalisation and globalisation processes, that the central issue in the international health dimension was the power differentials among nation-states, which were reflected in a two-way process: international health was determined by the outcome of negotiations in the international relations domain, at the same time as international health issues influenced such negotiations (ROVERE, 1992; PANISSET, 1992). In 1998, Charles Godue underlined the need to acknowledge the growing extent of the conflict inherent to international relations (the need to reconcile national interests and international dynamics) as one of the most important considerations in thinking about international health. From this standpoint, Godue argued that there was a need to go beyond the traditional conception of “international health”, historically very much centred on international health cooperation, because it tended to represent this field as an expression of ‘goodwill’ [solidarity] and ‘good faith’ among peoples, and failed to express or deliberately concealed the particular and hegemonic interests and intentions that permeate relations among countries in a dynamics of permanent dispute to gain or maintain power in the international arena (GODUE, 1998, p.28).

Other authors argued that the field referred to as “international health” had always centred on the – mainly economic – impacts of globalisation processes on the health of populations, but that the attention directed to relations between globalisation and health received different emphases that changed with place and time (LEE et al., 2002, p.10-11).

Initially, the key concern related to the threat of nation-states’ borders being “invaded” by external agents with an impact on their populations’ health, i.e. external threats such as infectious diseases, risk of epidemics (or pandemics) and environmental risks; biological and chemical weapons; human migration and drug trafficking, and others. To these were later added the differentiated and unequal problems
that current globalisation processes have caused to the health of populations, addressing which extends beyond nation-states’ borders and overlaps into the realm of international relations. Accordingly, the emphasis shifted to the relationship between world economic development and health; to the effects of macroeconomic adjustment on people’s lives and health and role of international organisations in that process; and to multilateral international trade agreements and global financial and trade flows involving the production and commercialisation of goods and services (such as drugs, medical equipment, medical care services) and so on. Two major issues also overlap into this set of problems: the diminishing autonomy of nation-states to set their own policies and the impossibility of their solving, on their own, certain problems that are beyond the scope of their decision-making. This wider focus was considered to justify changing the term to “global health”, in place of the former “international health”, in addition to signalling the need to formulate a global health policy (LEE et al., 2002).

In 2000, in a discussion over new avenues for the WHO to regain its “sovereignty” to respond to the new world conjuncture and its lost leadership in health sector stewardship, Kickbusch drew attention to the need to formulate a “global public health policy” (p.984-5), which would aim to reinforce rather than replace national health policies, underlining the interactive dynamics between the two spheres – national and international – in a context of global accountability. She regarded the “global” dimension as entailing not only greater interdependence, but also a new field of action that could be readily resolved to the national level, because the issues inherent to it reached across national borders (KICKBUSCH, 2000). Accordingly, a global health policy was inter-sectoral by definition and had to be interlinked with other policy areas, such as trade, intellectual property, food security, human rights (both fundamental and group-specific rights) and others. Here accountability is the process of making the various different actors more responsible for their acts nationally and internationally (KICKBUSCH, 2000).

This dynamics also changed the role of the international – and particularly intergovernmental – organisations, such as the WHO, because “global health policy” extends across geographical boundaries, relating to populations in general and to specific groups (i.e. the elderly, youth, women, the excluded in general) rather than to the interests of the organisation’s individual member states. However, the global health agenda had to be drawn up in such a way as to draw nation-states into acting jointly, as had already been done for some time in relation to the environment (KICKBUSCH, 2000, p.985).

Let it be added that although the global health agenda should disregard geographical boundaries, it cannot ignore geopolitical “boundaries” that define the power differentials between nation-states and thence their greater or lesser ability to mobilise resources to defend their particular interests and to negotiate in partnering and alliance-building in specific situations.

Brown et al. (2006) consider the expression “global health” not to be recent invention, although until recently its use was linked and limited to the “fear of epidemics”, besides its being used sporadically in official declarations and documents generally in relation to combating specific diseases (p.625). In their review regarding a possible transition from ‘international’ to ‘global’ health, they reiterate that the latter is “transnational” and emerged as part of a broader historical and political process surrounding the dynamics by which public health has globalised in recent decades.

By 1999, Chen et al. were arguing that globalisation, with its multiple impacts, was driving processes that structured health as a “global public good” and that two dynamics were contributing to that: a greater “international transfer of risks” and “the growing threats to common natural resources”.

Global public goods are defined by KAUL (1999) as those having non-excludable, non-rival benefits and spanning across borders, generations and populations. Included in this category are natural global goods (such as the ozone layer), man-made global goods (such as information and knowledge) and goods resulting from global policies (such as peace and health). Each category of global public good is seen to face specific political challenges: natural goods face under-utilisation and wastage; man-made goods are under-utilised or inaccessible to large parts of the world’s population; and health and other goods regarded as resulting from global policies are in short supply and difficult to accomplish.

Deneulin and Townsend (2006) argue that, unlike common public goods, global public goods can only be achieved by the collectivity, then to be shared individually by its members. Starting from the concept of “common goods” (synonymous with what Taylor, 1995, called “irreducibly social goods”) and in contrast to it, the authors define “global public goods” as those that inhere in common constitutive action, rather than being its product, and the non-excludable and non-rival qualities of classic public goods are aspects of the generation of global public goods (p.12).
debate – and which represents a recent change and poses new challenges for global health – is the exponential growth in new stakeholders acting in the sector, including numerous non-governmental organisations (NGO), particularly since the late 1990s.

Since 2000, "Global Health Initiatives" (GHI), previously known as "Global Health Public-Private Partnerships" or "Global Health Partnerships", have come to constitute a concerted response at the international level to the worrying increase in the global "burden of disease". Many of these organisations appeared (or gained importance) as a result of the "urgency" generated by worldwide adoption of the Millennium Goals. What is more important to note is that the GHIs mark increasing involvement by the private, philanthropic and civil society (non-governmental) sectors in health care. At present, there are some 100 GHIs, four of which – the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund); the Global Alliance for Vaccines and Immunisation (GAVI); the US President's Emergency Plan for AIDS Relief (PEPFAR); and the World Bank Multi-Country AIDS Program (MAP) – contribute a substantial portion of all foreign aid health funding (WHO, 2009).

This proliferation of actors, resources and political support in favour of global health, however, has not yet produced changes to match the investment made, although there is some evidence to the contrary, at least in some areas, such as control of AIDS and malaria (WHO, 2009). Generally speaking, it has accentuated health system fragmentation and in many parts of the world, even in countries with an acknowledged history of economic success, health continues to be an enormous challenge. That realisation led to a major global debate over the effectiveness of international health aid, which prompted initiatives and mechanisms to coordinate donors, as agreed in the Paris Declaration in 2005 and reiterated in the Accra Declaration in 2009.

Other partnerships have directed their efforts to the field of health research (such as the Global Forum for Health Research and the Council on Health Research and Development, COHRED) or health system and service research (the Alliance for Health Policy and Systems Research), acting in collaboration or in connection with the WHO.

Some authors see an added problem in the ever growing role of "supra-state forms of government" – i.e. international political institutions, funding agencies, supranational political and economic blocs, global think-tanks, GHIs, and others – in health sector decision making. Although not a new phenomenon, given that the international system has been gaining prominence ever since World War II, what is new is the growing power of these transnational institutions in conducting world affairs, particularly in recent decades. In addition, the rules, instruments and modes of operation of traditional institutions in the international arena are regarded as no longer adequate to respond to the challenges posed by world changes. As a result, the concept of global governance is gaining in significance (Deneulin & Townsend, 2006).

Kickbusch (2000) reports that, as early as 1998, Reinicke had advanced in formulating the notion of constructing "networks of governance", which leads into the concept of global health governance. In order to structure this environment for change, implementation of a global public policy would depend on two kinds of input – vertical ("thinking globally and acting locally") and horizontal (which would entail constructing public-private partnerships in such a way as to leverage each partner's best capabilities in the given circumstances) (p.228). The challenge for accountability was seen to reside in bringing "divergent" actors to work in a "network of joint accountability", which would reflect the interplay of vertical and horizontal power relations (p.984-5). The same author sees this as redefining the focus of the WHO's responsibility, reaffirming its mission in favour of public health rather than the interests of its member nation-states and constituting a new opportunity to strengthen its historical vocation of steering the health sector at the international level.

Meanwhile, Deneulin and Townsend (2006) add that the idea of global governance does not entail setting up either a supra-national world government or institutions with "super-powers", but rather increasing the coherence, effectiveness and legitimacy of already existing international institutions with a view to identifying and filling the gaps in the multilateral institutions' regulatory architecture. In order for global governance to be effective its multilateral institutionalisation, as well as partnering with new non-state or international actors, must follow new rules. Also, as it is neither possible nor desirable to govern without the nation-states, they would be the key actors in this dynamics, but would have to "share their sovereignty". Thus, the international institutions and mechanisms should complement the actions of local, regional or national governments and responsibility should never be exclusively any of those institutions'. There should therefore be democratic participation by various actors, including non-state actors, in a legitimate and globally accepted order.

Such "global governance" would make it possible to
provide “global public goods” on the basis of international instruments (accords and conventions) negotiated and signed by the various countries’ governments and relating to specifically problematical issues of global interest. Potentially, such instruments could function to leverage improvements in global health issues. Signing them, however, does not oblige governments and countries to assume any specific responsibility for implementing related policies, which considerably reduces their effectiveness.

In short, “global health governance” is defined in various manners, but for some years now the term has reflected an important endeavour at the international level to establish greater control over risks that can affect public health globally and to introduce mechanisms to coordinate external donors and aid.

As regards “health diplomacy”, the term emerged more recently, at the start of this century. Certain authors have taken the lead not only in using the term, but also constructing a definition and, most importantly, recording the facts and mechanisms that are shaping how it is applied in practice.

Kickbusch et al. (2007) argue that the concept of health diplomacy emerged to address health issues that extend beyond national borders and expose countries to global influences, calling for closer and more cohesive coordination between authorities of the health and international relations sectors. At the same time, they regard health diplomacy as the main instrument of global health governance, i.e., the mechanism that makes it possible to negotiate and establish commitments and new bilateral or multilateral alliances; it is a world […] where the art of diplomacy juggles with the science of public health and concrete national interests have to be set against the broader concerns of the international community in an environment of intense lobbying and advocacy where there is a variety of actors not restricted to diplomats (p.230).11

According to Novotny and Adams (2007), health diplomacy is an activity of political change with the dual purpose of improving global health while maintaining and strengthening international relations, particularly in areas of conflict and environments with meagre resources (p.1).

In general terms then, the expression “global health” is being used in different ways and interlinks these new concepts:

a) to refer to the manner of addressing the need to combat endemic and epidemic diseases (e.g. HIV/Aids, tuberculosis, malaria), particularly in the countries of the South, and also to the manner of controlling health risks, including those of pandemics (e.g. avian flu, A-H1N1 flu), not uncommonly on a “global security” approach;
b) to analyse the impacts of globalisation on public health, focussing centrally on health policy at the national level and how it interacts with the international level, on the possibility of generating a “global health policy”, including here the discussion of “global public goods” and “global governance”;
c) to discuss paths by which to achieve a “more equitable globalisation” in health terms, centring primarily on the discussion of macroeconomic issues and subsequently on determinants of health; or also
d) to build political strength with a view to structuring “a global struggle for health”.

The approaches taken to discussing these issues are varied and range from more narrower, functionalist views to broad humanist perspectives, as well as approaches grounded in history, political science and political economy.

On the basis of these references – and for the purposes of this capacity-building – global health is understood as “the outcome of permanent, reciprocal influence between international relations and health problems, which permits the study of national and international determinants of public health to be approached from a broader and more complete perspective involving knowledge from various different disciplines, with a view to proposing the adoption of social policies directed to solutions for these problems” (GRUPO DE SALUD INTERNACIONAL, 1998, p.9).12 Accordingly, global health refers to the area (or field of knowledge) that addresses the international issues that impact, or are reflected in, the health of people and populations and require specific policy interventions. Such interventions often extend beyond the borders and exclusive decision-making domains of individual nation-states and depend on various actors’ intervening in their formulation and implementation. And health diplomacy is understood as the multiple negotiating efforts involving the widest variety of actors, which are necessary to drive change regarding health issues and which, at the same time, promote the health of populations globally, but without losing sight of the dialectic dynamics between specific national interests and the need to maintain and to strengthen international relations (ALMEIDA & PIRES de CAMPOS, 2009).

In short, with these new concepts, attention is being drawn – in one way or another, and taking the processes of
globalisation and internationalisation as the frame of reference – to the need to acknowledge that one of the most important aspects of thinking about global health and health diplomacy is the increasing and intrinsic conflict between international relations and the exercise of safeguarding national interests. This worsening conflict is regarded as connected with the asymmetrical distribution of power among nation-states, which is leveraged in turn by globalisation, resulting in unequal ability to influence the global system (ROVERE, 1992; GODEU, 1998; PANISSET, 1999; LEE et al., 2002).

Specific interventions and policies are therefore necessary to address this complexity which has global effects on the health of populations in various different parts of the world, but to date not enough knowledge is being produced nor human resources capacitated to deal with these new realities.

The core issue and analytical focus: relations between globalisation and health

Since the mid-1990s relations between globalisation and health have received increasing attention and, since the end of that decade, there has been rapidly expanding interest in producing knowledge on the subject, and also a proliferation of courses and workshops designed to train and build capacity to deal with the issues posed by such relations in the fields of both health and diplomacy.

As regards the generic term "globalisation", some authors use it to refer to a longstanding process inherent to capitalism, while others see it as a new, multifaceted phenomenon with a number of interconnected dimensions. In fact, these perceptions complement each other, because the growing interdependence among the world’s economies is indeed a longstanding phenomenon and inherent to capitalism, but the recent aspects of globalisation are neither “natural” phenomena nor inexorable dynamics, but rather are actively produced in specific political and economic conjunctures (TAVARES & MELIN, 1998) and have serious repercussions in the economic, social, political and cultural fields.

While the precise meaning of the term “globalisation” is the subject of debates and theoretical disputes, there is a consensus that the development and evolution of globalisation over recent decades have profoundly transformed the world context in all spheres of people’s lives everywhere on the planet.

For the purposes of this paper, globalisation is understood as a complex process involving the intensification of world interactions over the past three decades and affecting all possible areas of social life: from the transnationalisation of production and financial processes to the revolution in information and communication technology; from the supposed erosion of the nation-state to the rediscovery of civil society; from major cross-border movements of people and goods to the leading role played by transnational corporations and multilateral financial institutions; and from new cultural and identity-related practices to globalised styles of consumption (SOUZA SANTOS, 2005, p.11; FIORI, 1997).

As described by Boaventura de Souza Santos, a review of studies of globalisation processes reveals that we are faced with a multifaceted phenomenon with economic, social, political, cultural, religious and juridical dimensions interlinked in a complex manner (2005, p.26).

On that view, globalisation does not take the form of greater homogeneity and uniformity, as some would have, but rather interacts perversely with other world changes: the dramatically widening inequalities between rich and poor (both countries and people), enormous concentration of wealth and power (financial, political, technological), environmental catastrophes, ethnic and religious conflicts, mass migrations, the proliferation of civil wars, intensification or globally organised crime and so on (SOUZA SANTOS, 2005; FIORI, 1997). Far from being harmonious, this process is a vast and intense field of conflicts and struggles, between hegemonic social groups, states and interests, on the one side, and subordinate social groups, states and interests, on the other (SOUZA SANTOS, 2005, p.27). Moreover, as hegemonic globalisation is also the outcome of decisions by states, it is an “eminently political act” (SOUZA SANTOS, 2005, p.50).13

The economic aspect has gained prominence because these changes appear to have been brought about by changes in economic policy arrangements at both the national and international levels. In addition, the “liberal” economic discourse underlying these changes revived the original rationale in favour of capitalist social organisation. Fiori notes that, ever since Adam Smith’s famous book, “The Wealth of Nations” (1776), the perception has solidified that capitalism would foster progress by the forces of production, paving the way to a whole series of utopias connected with the idea of material progress and social homogenisation. Of these, the oldest is the liberal utopia, which has lived on ever since and recently culminated with […] globalisation. Part of that utopia predicted that the development of productive forces and the universalisation of wealth under capitalism would lead to the disappearance of territorial States (FIORI, 1999, p.14-5).
That same “idea-force” underlay globalisation.

However, while the utopia endured and regained strength with globalisation, the march of history did not bear out the prediction; on the contrary, as Fiori notes, what the past two centuries show is a process of tremendous concentration of political power and wealth in a small number of – basically European – states14, later joined by the United States and Japan. Thus, what was not borne out was the assumption that nation-states, with their powers and their competitions, would be supplanted by markets, which – ever since Adam Smith and David Ricardo – have been endowed with a purported ability to stimulate development and afford equal wealth (FIORI, 1999, p.14-5). The failure of liberal economics during the inter-war period and the growing dispute between competing systems of social organisation that sought to extend their territorial domains – the Cold War – led to a developmentist optimism that spread worldwide under the auspices of new multilateral institutions, such as the United Nations and the World Bank, set up soon after World War II. There was thus a growing perception that economic development would spread across the whole planet. The “golden years” did actually see a narrowing of the gap between the wealth of industrialised and developing countries (FIORI, 1999, p.16).

Beginning in the mid-1970s, however, progress in this direction was reversed16. The various developmentist theories formulated in the immediate post-World War II period came in for harsh criticism. Thus, although it was only during that period that the Third World countries managed to grow at a higher mean rate than the wealthier countries, in the decades of 1980 and 1990 these same countries have been encouraged or compelled to abandon their economic and institutional structures in favour of others organised around free market principles. It is this that lays bare the existence of an international hierarchical order among nation-states. According to Fiori’s analysis, the liberal economic and political order embodies a dual international hierarchy – of economic and political power – and the liberal revival of the 1980s was a clear demonstration of these hierarchies. This resurgence accelerated and radicalised at two points: as of 1979, with the political triumphs of conservative political forces in the United Kingdom, United States and Germany and, at the start of the 1990s, with the dissolution of the socialist world and the end of the Cold War. Accordingly, measures to re-establish self-regulating markets were applied with renewed force: domestic and external markets – particularly labour and money markets – were thrown open and deregulated.

These authors draw attention to the fact that starting from an analytical perspective that presents the economic dimension as predominant conveys the idea that it is not only a linear process, but a consensual one (TAVARES & MELIN, 1998; FIORI, 1999; SOUSA SANTOS, 2005). This perception, although false, is dominant and has been spread worldwide with striking speed (ANDERSON, 1995), but even in the hegemonic field there are internal divisions and divergences as to what the key dimensions of globalisation are. In any case, the idea of globalisation is framed by certain “fabricated” consensuses that together constitute what is known as the neo-liberal consensus or the “Washington Consensus” (formulated and explicitly stated in the 1980s) (FIORI, 1997; SOUSA SANTOS, 2005). These consensuses not only endow the process with its dominant characteristics, they also legitimate it as the only one possible or proper, whether for interpreting the phenomena or prescribing the solutions.

In the economic sphere, this consensus is guided by four main institutional innovations: drastic restrictions on state regulation of the economy; expansion of privatisations; creation of new international property rights for foreign investors, scientists and creators of innovations affording intellectual property; and the submission of nation-states to the dictates of multilateral agencies (World Bank, International Monetary Fund, International Labour Organisation). This meant that international organisations came to exert undue influence on policy making and implementation, with the constraints imposed by creditor Banks substantially reducing nation-states’ ability to redefine their policies (GILPIN, 1993; MALLOY, 1993; KAUFMAN, 1995). This all serves to identify an important rearrangement in the power to conduct the global dynamics.

The prescriptions drawn from these premises were applied worldwide, with greater or lesser rigour, and caused upheavals in the social contract, in legal frameworks and in institutional arrangements, particularly in countries on the periphery (SOUZA SANTOS, 2005, p.31), because it is they who have been most subject to the impositions and prejudiced by them. Also, for the weaker states, any loss of capability and autonomy to define their own policies meant, in the existing inter-state system, greater submission to the interests of the stronger states.

There has also been an increase in donations and humanitarian aid to address social and health issues, while the agreements, treaties and instruments that regulate relations among countries have become increasingly complex. These
are recent phenomena resulting from the measures taken to surmount the problems brought on by this dynamics (GARRETT, 2007; FIORI, 2004, 2007).

In the social and political realm, inequities worsened, especially in the 1980s. The concentration of world wealth reached scandalous proportions and in this respect, once again, it is the peripheral countries that lead the world ranking. The economy has been de-socialised, the concept of consumer has supplanted that of citizen and the criterion of inclusion has ceased to be a right in favour of solvency [...] (SOUZA SANTOS, 2005, p.43) or the insolvency of the poor, for whom there will be measures to mitigate, but not eliminate, their exclusion (ALMEIDA, 1995, 1996, 1997; 2002a, b; 2006).

In the cultural sphere, the emphasis has shifted from socio-economic to cultural phenomena, reigniting the discussion over causal precedence in explaining life in society; in addition to which, this interconnects with another equally key issue: to what point globalisation entails homogenisation and, most importantly, what power relations produce homogenisation or differentiation (SOUZA SANTOS, 2005, p.44-6).

All in all, although apparently transparent and simple, the idea of globalisation, as currently and imprecisely used, obscures more than it enlightens, because in the literature there is a multiplicity of discourses that evidences the need for critical theoretical thinking to be able to grasp the complexity of the phenomena involved and the disparity of interests that they bring into confrontation (SOUZA SANTOS, 2005, p.54).

Boaventura de Souza Santos identifies three apparent contradictions in these discourses, which mark the historical transition the world is going through and can be used in constructing new theory. The first is between globalisation and localisation, because at the same time as social relations seem to be increasingly de-territorialised, so new regional, national and local identities are emerging. The second is between the Nation-state and the transnational non-state, which raises one of the most controversial points in this debate over the state’s role in a globalised world. The third relates, on the one hand, to the view of globalisation as proof of the renewed and incontestable energy of capitalism; and on the other hand, to the perception of globalisation as an opportunity to expand the scale and scope of transnational solidarity and anti-capitalist struggles.

Santos sees these disjunctions as pointing to a transitional period in three main dimensions: transition in the system of hierarchies and inequalities in the world system; transition in institutional format and complementarity among institutions; transition in the scale and configuration of social and political conflicts (SOUZA SANTOS, 2005, p.55-6). Other authors endorse this view, although they build on a different analytical footing, more concerned with the discussion of hegemony in the exercise of global power (FIOBRI, 2004, 2007). In addition, contradictorily, the state’s retraction cannot be achieved without strong state intervention. The state has to intervene in order to cease to intervene, that is, it has to regulate its own deregulation (SOUZA SANTOS, 2005, p.38). Simultaneously, it has to strengthen itself in order to carry out reforms, at the same time as reforming itself (FIOBRI, 1997).

The new world relations resulting from changes connected with the phenomenon of globalisation have meant important alterations in the ways the various spheres of social life are provided for. One consequence of these changes which has received some attention is that these simultaneous shifts have modified the determinants of health by modifying social stratification and vulnerability and risk-exposure differentials, and also the characteristics of health systems, as reflected in inequalities in access to services (LABONTE & SCHRECKER, 2007, p.9). The impact of these processes of change has led to the emergence of new patterns in relations between health and disease, which are not necessarily contained within national borders (LABONTE & SCHRECKER, 2007, p.34). This shift has come about both because the conditions of life of considerable portions of the world’s population are deteriorating absurdly, particularly in the South, where hunger, poverty and risks are all increasing exponentially, along with the attendant insecurity they entail; and because such processes are causing new problems, either health problems as such or problems that impact people’s health particularly. These include emerging and re-emerging (new and old) diseases and epidemics, the destructuring of health service systems, the enormous increase in displacements and migrations (of people and health workers) and so on.

Considerable efforts have been ongoing for some years now to construct broad analytical frameworks capable of throwing light on these relations between globalisation and health by permitting evidence-based scrutiny of their impacts on the social determinants of health. Efforts are also underway to restore the human rights and global public good approaches as frameworks for improved global health governance.

In terms of the World Health Organisation, this endeavour was expressed initially in the work of the Commission on Macroeconomics and Health (CMH), which the WHO set up in 2000 with financial support from the World Bank and the Bill and Melinda Gates Foundation and whose report
was published in June 2001 and presented to the World Health Assembly in January 2002. The CMH's conclusions adhere quite closely to the 1993 World Bank Report (World Development Report: Investing in Health, World Bank, 1993), which examined health in the world on the basis of strictly economic parameters and set out a scenario for health policy reforms. The CMH acknowledged the criticisms levelled at traditional vertical programmes; it coined the term “scaling up” to refer to selected interventions for which funding, managed out of a Global Fund to Fight AIDS, Tuberculosis and Malaria, would flow from the wealthy countries to the poor countries. However, it did not advance towards proposals that would permit such development in poor countries, nor did it discuss the terms of the South’s subjection to the North, particularly as regards debt payments and structural inequalities in trade negotiations that are at the root of poverty and disease (LEGGE, 2007).

In parallel, the Millennium Goals (ODM, 2000) (Millenium Development Goals Report, 2009) set 8 goals to be achieved by 2015, which ranged from eradicating extreme poverty, controlling the HIV/AIDS epidemic, through to attaining universal primary education, reducing infant mortality and improving maternal health, promoting gender equality and empowering women, assuring environmental sustainability and developing global development partnerships. Here too, the groundwork for setting the goals was laid by specialised work by various groups of professionals from all over the world.

Some years later, in March 2005, the WHO also set up the Commission on Social Determinants of Health (CSDH). The CSDH draws societies’ attention to the social determinants of health and its intention is to support countries and global health partners in addressing factors that lead to ill health and inequities, besides suggesting policy changes to foster practices that address social determinants of health effectively. It frames health as a goal to be shared by the various different sectors of society, while also supporting construction of a global movement for action in favour of health equity and the social determinants of health by inter-relating governments, international organisations, research institutions, civil society and communities. To perform its task, the Commission worked with a series of Knowledge Networking Groups of specialists from all over the world which produced specific thematic reports.

In common, all these endeavours regard the issue of global health as connected with broader dynamics that extend far beyond the health sector field, but they approach the problem from different perspectives. Even so, these debates contribute – albeit in disordered fashion – to constructing the concept of global health, they offer important input into thinking about the role of health diplomacy and they pose significant challenges for action in this area.

The 1st Specialisation Course in Global Health and Health Diplomacy: curricular structure and first results

The idea of developing an International Health capability at the Fiocruz and of training human resources to work in health at the international level is not new: it dates from the 1990s when the Fiocruz took part in discussions led by the PAHO to review the concept of international health and the training of personnel in this area (PAHO, 1992). Since then, the Fiocruz has pursued a number of initiatives in that direction and, in 2006, this political will begin to take concrete shape including its steadily growing participation in international health-related forums and arenas. In that same year, an institutional working group was set up bringing together professionals from the various different institutes at the Fiocruz, who discussed and formulated a work programme of research and teaching in global health. This process of institutionalising this area culminated in the 1st Specialisation Course in Global Health and Health Diplomacy. Its aims are specified in the Box below.

The course content is being built up on the basis of research by the “Global Health and Health Diplomacy” research group, which has been registered with Brazil’s National Research Council (CNPq) since 2008, and of joint discussions among the course professors, who belong to various different departments and institutions, internal and external to the Fiocruz, in the fields of health, international relations and diplomacy.

The 1st Specialisation Course in Global Health and Health Diplomacy offered by the ‘Sergio Arouca’ National School of Public Health (ENSP) was given in Brasilia, from May 2008 to April 2009. It involved participation by various different institutions, internal and external to the Fiocruz, as well as operational cooperation from the PAHO/WHO Brazil Country Office. Ministry of Health authorities and diplomats and staff of Brazil’s Foreign Ministry also took part in the course, giving...
conferences and lectures or sitting on discussion round tables on specific subjects. Personnel from PAHO/Washington and WHO/Geneva were also invited and joined the teaching staff.

The selection process drew applications from 39 health professionals of whom 34 were chosen (4 of these did not enrol). Finally 30 students took the course, of whom 26 completed it and were approved (87% of the total), with 4 discontinuing at various different points, mainly because of constraints imposed by their respective work activities. The great majority (28 students; 93.4%) worked at the Ministry of Health, mainly in Brasília, although 73% received their basic training in fields not strictly related to health, with 36.7% trained in international relations, confirming the growth in this profession in Brazil in recent years. Postgraduate qualifications (specialisation or masters degrees) were held by 20% of the students and two were completing doctorates in related fields, one outside Brazil.

Most of the students worked in international cooperation or related areas (26 students, totalling 86.6%), while only 3 of the Ministry of Health group did not work directly in international cooperation.

The thinking guiding construction of the course curriculum centred fundamentally on establishing a substantive dialogue between the fields of health and international relations (Chart). The course was structured over a total of 460 hours, with 360 class hours distributed into 10 modular Course Units given over 8 months and concentrated in the first week of each month. A Tools Unit totalling 30 hours was distributed throughout the course after each of the Course Units (Diagram).

On completion of each unit, the students were evaluated by written examination or specific project.

Preparation of the course final project (CFP) was allocated 100 hours. Each student worked on a theme/problem that was important or had to be addressed in their work and was advised by a tutor specifically designated for the purpose. The CFPs were presented in poster form at the course closing session (Figure).

Students and faculty separately evaluated each unit on completion and, at the end of the course, evaluated all units comparatively and the course as a whole. The results of those evaluations, from both students and faculty, were generally positive and praising. A Final Seminar was also held with the participation of faculty, managers and experts in the field in order to evaluate the course, decide on future directions and discuss the challenges and difficulties to be overcome in future courses. Insufficient attention was considered to have been given to some themes, such as international law and the preparation of global health and health diplomacy projects, programmes and instruments (treaties, agreements, etc.). It was also suggested to introduce more practical exercises on the dynamics and techniques of negotiation, simulation of crisis situations and discussion of case examples.

As a development from that first experience, the ENSP/Fiocruz intends to offer a strict-sense postgraduate Masters programme in Global Health and Health Diplomacy, as well as continuing with the specialisation course.

To conclude

The brief discussion presented in this paper attests to the “emergence of new objects of study in the collective health field, known generically by the terms “global health” and “health diplomacy” (ALMEIDA et al., 2007-2008), but which also include other concepts, such as “global public

---

Box - Aims of the 1St specialisation Course in Global Health and Health Diplomacy

<table>
<thead>
<tr>
<th>Overall Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>To prepare students to analyse and discuss the relations between the dynamics of globalisation and its impact on health policies, health and social protection systems and public health at the national and international levels.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific Aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>To prepare students to</td>
</tr>
<tr>
<td>1) Analyse and discuss the ways globalisation is impacting on health policies, health systems and the health of populations (at the national level).</td>
</tr>
<tr>
<td>2) Analyse and discuss what policies (at the national and global levels) are needed to meet the challenges posed by globalisation processes and to avert (or at least minimise) the related burden on the health of populations.</td>
</tr>
<tr>
<td>3) Analyse and discuss Global Health-related issues that impact on international relations.</td>
</tr>
<tr>
<td>4) Identify and analyse Global Health-related issues that are intrinsic to international relations.</td>
</tr>
<tr>
<td>5) Develop the knowledge necessary to inform the debate over international relations and health.</td>
</tr>
<tr>
<td>6) Support decision-making to construct and implement policies designed to help achieve greater equity in health systems and to protect global public goods that can contribute to the wellbeing of humankind.</td>
</tr>
</tbody>
</table>

## Chart - Summary Course Structure and Coordination

**OVERALL COORDINATION:** Celia Almeida (ENSP/Fiocruz), Rodrigo Pires de Campos (DIREB-Fiocruz/Brasilia) and José Paranaguá de Santana (PAHO/Brazil Country Office, Brasilia)

<table>
<thead>
<tr>
<th>COURSE UNIT</th>
<th>HOURS</th>
<th>COORDINATION</th>
</tr>
</thead>
</table>
| Unit 1 – Introduction to the subjects of Global Health and Health Diplomacy | 30 h | Celia Almeida, MD, MPH, PhD (ENSP/Fiocruz). Collaborators: CRIS/Fiocruz and professors of IREL/UNB.  
Unit 10 – Tools | 4 h | Celia Almeida, MD, MPH, PhD (ENSP/Fiocruz) and José Paranaguá Santana, MD, MPH (PAHO/Brazil Country Office, Brasilia/Human Resources Development Unit). Collaborator: Paulo Buss, of CRIS/Fiocruz. |
| Unit 2 — Global Health and Brazilian Foreign Policy: historical perspective | 30 h | Gilberto Hochman, PhD, Political Science (COC/Fiocruz). Collaborators: professors of IR/PUC, Rio de Janeiro.  
Unit 10 – Tools | 4 h | Celia Almeida e José Paranaguá Santana. Collaborator: Paulo Buss of CRIS/Fiocruz. |
| Unit 3 — International Cooperation: concepts and practices | 60 h | Rodrigo Pires de Campos, PhD, International Development Cooperation, Brasilia Catholic University-PUC, DIREB/Fiocruz. Collaborators: PAHO/Brasilia and CRIS/Fiocruz.  
Unit 10 – Tools | 4 h | Celia Almeida and José Paranaguá Santana. Collaborator: Paulo Buss. |
| Unit 4 – Globalisation and Health | 30 h | Andrés Ferrari Haines, MA, PhD, Economics (IEI/UFRJ; FE/UFF; ENSP/FIOCRUZ). Collaborators: professors of UFRJ and UNICAMP Institutes of Economics.  
Unit 10 – Tools | 4 h | Celia Almeida and José Paranaguá Santana. |
Unit 10 – Tools | 4 h | Celia Almeida and José Paranaguá Santana. Collaborator: Paulo Buss. |
| Unit 6 – Transnationalisation of Health Risks | 45 h | Carlos Machado de Freitas, PhD, Public Health (ENSP/ CESTEH/ FIOCRUZ).  
| Unit 7 – Globalisation, Science and Technology and Health | 30 h | Claudia Chamas, PhD, Sciences (Biophysics) (IOC/FIOCRUZ)  
Unit 10 – Tools | 2 h | Celia Almeida and José Paranaguá Santana. Collaborator: Paulo Buss. |
| Unit 8 – Globalisation and Human Resources for Health | 30 h | Célia Pierantoni, PhD, Collective Health (IMS/UERJ); José Paranaguá Santana, MD, MPH (PAHO-Brazil Country Office, Brasilia/Human Resources Development Unit); José Roberto Ferreira, Doctor Honoris Causa, ENSP/Fiocruz. Collaborator: Ministry of Health, Human Resources Department, Brazil.  
Unit 10 – Tools | 4 h | Celia Almeida and José Paranaguá Santana. |
| Unit 9 — Health Diplomacy | 45 h | Rodrigo Pires de Campos, PhD, International Development Cooperation, Brasilia Catholic University-PUC, DIREB/Fiocruz, Brasilia. Collaborators: professors of IREL/UNB, and Foreign Affairs Ministry diplomats and staff, Brazil.  
Unit 10 – Tools | 4 h | Celia Almeida and José Paranaguá Santana. |
| Sub-total | 360 h | Support and supervision by 12 tutors from various institutions. |
| Course Final Project (CFP) | 100 h | |
| Total | 460 h | |
The definitions of these terms need refining and, more importantly, greater conceptual precision. The literature devoted to discussing this broad, multifaceted process and, moreover, to documenting the facts, organising the data and describing particular local situations influenced or “determined” by global prescriptions, is now numerous, but there is still little of the more properly theoretical thinking and empirical analyses that would make it possible to surmount explanatory biases and advance in developing theoretical frames of reference adequate to this new complexity.
In that connection, in spite of the headway that has been made, it is still necessary to develop sound analytical frameworks to contend, on the one hand, with the contradictions and paradoxes that make up the discourses of globalisation and, on the other, with their inter-relations with health issues.

Very briefly, one could say that in spite of the – still insufficient – increase in resources for combating poverty and diseases, the developing countries depend more and more on international aid and cooperation in order to overcome the mounting difficulties of recent decades. It is usual for them to be overwhelmingly pressured by funds “earmarked” by donors and specific and by disjointed international cooperation programmes, while having to deal with a context of severe health conditions and very poor implementation and management capability. Humanitarian aid is often misused and cooperation ineffective, achieving neither the proposed goals nor the desired impact. The goals change or are continuously redefined to suit donor requirements or coordination efforts at the national level (UNRISD, 2007).

And this is the other side of the coin. Many of the actors in this “drama” have to perform in a context that is not promising. The policy implementers (governments, health workers, national and international NGO) are often highly dependent on external funding and must follow the global rules set by the international organisations and imposed by the fund donors or project financiers; they work under pressure to show “results” defined according to the funder’s parameters and have insufficient time to think about or understand the local health situation they are supposed to act on. The recipients of these actions (the people and populations) live and work in extremely precarious conditions where there are often no functioning networks of health or education services and extensive poverty goes hand in hand with high rates of illiteracy and lack of information. Disillusionment, lack of confidence in health systems, lack of communication, information and hope are common in this context (MOONEY & HOUSTON, 2008; THIEDE & MCINTYRE, 2008; ALMEIDA, 2008).

This situation also poses new challenges for international cooperation and it is important to train personnel to work appropriately and more effectively in this field.

The results obtained from the 1st Specialisation Course in Global Health and Health Diplomacy are encouraging and confirm this as a priority area for human resource capacity-building in Brazil, in view of the recent changes in Brazilian foreign policy and the priority given to health in the South-South cooperation projects that Brazil is developing, as well as the interest that has been expressed in holding other similar courses. The content chosen has proven appropriate, but has to be improved, and the evaluation methodology yielded important input for the necessary revision of this training, which will be implemented in future courses.

Notes

1. For a more detailed discussion of global health and health diplomacy as new objects of study in collective health, see Almeida et al (2007-2008).

2. The documents that tie together the policies and strategies of “Health for All” (WHO, Technical Cooperation. 30th World Health Assembly, Geneva, May, 1977), Primary Health Care (WHO. Global Strategy for Health For All by the Year 2000, “Health For All” Series, No. 3, Geneva, 1981) and Global Strategy for Health For All by the Year 2000 (WHO and UNICEF. Primary Health Care. Final Report of the Conference on Primary Health Care, Alma Ata, USSR, September, 1978), state clearly that international health actions play a central role in achieving this goal (Rodríguez, 1992:128)

3. The 1st International Sanitary Conference, a historical landmark in international cooperation, was held in Paris in 1851. For the first time European states met to discuss coordinated cooperation measures to combat the threats of cholera, plague and yellow fever (FIDLER, 2004).
4. This line of argument was adapted from Lee et al., 2002, with the addition of the author’s view of this discussion.

5. The definition of common goods is: “A characteristic of common goods is that they cannot be chosen by individuals alone. They can neither be constructed by individuals separately, nor are they a collectively generated ‘resource bank’ available to individuals to choose, or not choose, from. Yet neither do they exist only because of some kind of forced co-operation. Common goods exist because of a tradition of shared action which makes them possible, and in which people participate freely, thereby sustaining and developing it. Of course particular people may freely choose to begin to participate or to cease to do so. But, rather than being attainable simply by individual choice of a pre-existing resource, such goods exist only in the common action that generates them (DENEULIN & TOWNSEND, 2006, p.12).

6. Ledge writes that much of the pressure to form these partnerships was triggered by the need to mobilise “corporate charity” to relieve the “drugs crisis” in developing countries and attempt to avert the risk of more thoroughgoing reform of the intellectual property regime (LEGGE, 2007, p.14).

7. In 2007, the Global Fund donated US$2.16 billion and the PEPFAR, US$ 5.4 billion and, together with the MAP, these three GHs contributed more than two thirds of all external funding worldwide for controlling the HIV/AIDS and malaria epidemics, particularly in countries with little funding. In many of these countries, especially in Africa, government health budgets are more than 50% dependent on external funding (World Health Organisation Maximizing Positive Synergies Collaborative Group, 2009, p.2137-8).

8. For further details, please see articles by Almeida et al. and Buss & Ferreira, in this same issue.

9. The WHO, although not hegemonic in many conjunctures, is the most important of United Nations institutions with an influence on public health; but many others – UNICEF, UNAIDS, UNDP, UNEP and the World Bank – also play important roles in the health sector, the latter giving substantial leadership, especially since the 1990s (MELO & COSTA, 1995; ALMEIDA, 1995, 2005; BROWN et al., 2007).

10. Deneulin and Townsend (2006) report that it was formulated as a result of a measure by the Belgian government.

11. Global health diplomacy is at the coal-face of global health governance - it is where the compromises are found and the agreements are reached, in multilateral venues, new alliances and in bilateral agreements. It is a world to which outsiders find it difficult to relate, where the art of diplomacy juggles with the science of public health and concrete national interest balances with the abstract collective concern of the larger international community in the face of intensive lobbying and advocacy. No longer do diplomats just talk to other diplomats – they need to interact with the private sector, nongovernmental organizations, scientists, activists and the media, to name but a few, since all these actors are part and parcel of the negotiating process” (KICKBUSCH, 2007, p. 230).

12. This definition was formulated by the Grupo de Salud Internacional de la Pontificia Universidad Javeriana, Facultad de Ciencias Políticas y Relaciones Internacionales, Facultad de Ciencias Económicas e Administrativas, and Facultad de Enfermería in order to conceptualise international health. However, it seems very appropriate to the concept of global health from the point of view analysed in this paper (GRUPO DE SALUD INTERNACIONAL, 1998, p.9).

13. The fact that the – generally convergent – political decisions have been taken over a short period of time and many States have not had the option to decide differently does not eliminate the political nature of the decisions, it merely displaces their political centre and process (SOUZA SANTOS, 2005, p.50).

14. In the same period, exactly when the capitalist economy was turning into a unified, global phenomenon, Europe took colonial political control of about a quarter of the world’s territory and set up the trade networks and material base for what was later known as the economic periphery of the world capitalist system (FIORI, 1999, p.16).

15. In only a few years, all the peripheral economic ‘miracles’ were swept away in succession: first to be brought down, before the 1960s were over, were the few African success; then, in the 70s and 80s, the Latin American developmentist economies were ruined, one after another; next was the turn of the ‘real socialist’ countries; and now, in the late 1990s, it is the ‘Asian economic miracles’ that are starting to go downhill. In this way, the 20th century too is drawing to a close leaving the strong impression that so much has been done and yet, at best, we are where we were before terms of the distribution of world power and wealth” (FIORI, 1999, p.23).

16. This commission was coordinated by Jeffrey D. Sachs.


18. The Commission’s work focussed on three broad themes that encompass the main social determinants of health. Each of these was examined by a Knowledge Network (KN), comprising experts in the specific field who collectively studied the social determinants and the health equity issues related to their field. The final reports by each KN and other supporting documents,

19. In October 1985, in Washington, the PAHO launched the “Training Program in International Health” (PAHO/WHO, 1985). Also called the “Residency in International Health”, it was designed to build human resource capacity, but also contributed to generating knowledge on the subject. The intention was to train leaders in international health and promote development of technical cooperation in countries in the region, with a view to achieving the goal of Health For All by the Year 2000. This program ran for 8 years. It was evaluated and adjusted periodically and culminated in the Workshop “International Health: a Field of Professional Study and Practice”, held in Quebec, Canada, from 18-20 March, 1991, by the PAHO/WHO, Canada’s Ministry of Health and Welfare and Quebec’s Ministry of Health and Social Services. This workshop brought together professionals from various fields of knowledge and discussed both the concept and practice of training (Rodríguez, 1992: 128-130). Fiocruz took part in this process of discussion. The papers presented and discussed at the workshop and the conclusions of those discussions were published in book form (PAHO, 1992).

20. These initiatives are various, but of particular note was the workshop “Saúde e Relações Internacionais” [Health and International Relations], held by the Fiocruz in partnership with the Ministry of Foreign Affairs, from 05-09 June 2006, in Itamaraty, Brasília.

21. Various colleagues, from both Brazil and elsewhere, made decisive contributions to this process. The former included particularly Paulo Buss, president of the Fiocruz at the time (2000-2008), but who had given international health his close attention since the 1990s; José Roberto Ferreira, today director of international cooperation inat Centre for International Relations−CRIS/Fiocruz, former director of what was then the Fiocruz’s International Cooperation Advisory Office (today included in the Centre for International Relations−CRIS, of Fiocruz) and Antonio Ivo de Carvalho, currently director of the ENSP/Fiocruz (from #… to date).

22. Various colleagues made decisive contributions to this process, particularly Paulo Buss, president of the Fiocruz at the time, José Roberto Ferreira, director of what was then the Fiocruz s International Cooperation Advisory Office (today included in the Centre for International Relations−CRIS, of Fiocruz) and Antonio Ivo de Carvalho, currently director of the ENSP/Fiocruz (from #… to date).

23. Various departments of the ENSP took part in this course, along with other technical units of the Fiocruz (Instituto Oswaldo Cruz−IOC; Casa de Oswaldo Cruz−COC; Centro de Desenvolvimento Tecnológico em Saúde− CDTS; and the Centro de Relações Internacionais da Fiocruz−CRIS); the Instituto de Relações Internacionais−IREL, of the University of Brasilia; the Instituto de Relações Internacionais da Pontifícia Universidade Católica (PUC), Rio de Janeiro; as well as professors from various international relations fields working in other institutions.

24. See Almeida et al., in this issue of RECIIS.

Bibliographic references


