

# A European Centre for Infectious Diseases (ECID): a need for the future

Jean-Claude Piffaretti

What can be done to combat the threats from infectious disease in the 21st century? A new collaborative venture is being actively considered by a group of microbiologists from around the world.

## ● Europe and the threat of emerging and re-emerging infectious diseases

At the dawn of the new millennium Europe, like other nations, is facing unpredictable and potentially dangerous threats to public health. Over the past few decades improvements in welfare and the availability of potent antibiotics have led us to regard infectious diseases as all but conquered, but this perception has recently changed dramatically. Overcrowding, socio-economical instability, massive population migrations and inadequate measures to tackle infections will favour the emergence or re-emergence of infectious diseases and the spread of pathogens. Furthermore, global warming may bring infectious diseases from tropical to temperate countries.

Pathogens respect no borders. If we want to maintain control of European public health, we have to co-operate by sharing know-how and costs. It is not enough (although necessary) to build European or even worldwide networks to carry out surveillance; a more aggressive attitude is essential to fight, or better, prevent outbreaks of infectious diseases when and where they arise, and before they become apparent to an alarm network, which might be too late.

## ● Usefulness of a European Centre for Infectious Disease (with walls)

Convinced that Europe should have a centre devoted to the control of infectious diseases, Michel Tibayrenc, Director of the Centre d'Études sur le Polymorphisme des Micro-organismes at ORSTOM, Montpellier, called together an international board of scientific advisers on 11–12 September 1998 to discuss the proposed European Centre for Infectious Diseases (ECID) project. It was evident to all present that a centralized European organization to fight emerging and re-emerging infectious diseases was desirable. The majority considered that a 'bricks & mortar' structure was much more attractive, useful and efficient than a network of existing structures because it would bring together experts in different fields such as research, training and surveillance. This approach received particular support from representatives of developing countries, citing the US Centres for Disease Control (more precisely the National Centre for Infectious Diseases; NCID) as a prestigious and efficient organization.

The proposition, then, is for a main centre, with outstations and corresponding centres, not only in European states, but also in developing countries.

## ● Co-ordination with existing or future European structures

European expertise in terms of research on, and surveillance of, communicable diseases is considerable, so it is crucial that the activities of the ECID are co-ordinated with existing organizations, such as Britain's CPHL and France's Pasteur Institutes, and with health surveillance networks, such as the Réseau National de Santé Publique (RNSP) in France or the European Network for Epidemiological

Surveillance and Control of Communicable Diseases, created by the European Parliament last June.

The proposed ECID would have three main goals.

(i) **Advanced research.** ECID research programmes should be holistic. The opportunity would exist to study infectious diseases encompassing all the parameters of the transmission chain. The advent of powerful technologies such as extensive sequencing projects, genomics, DNA chips, etc., begs a multidisciplinary approach to infectious diseases. This could also be an opportunity to revive some vanishing, although indispensable skills such as traditional, whole-organism microbiology and entomology.

(ii) **Surveillance, control and prevention.** Surveillance, control and prevention are unquestionably the purview of individual nations. In the USA surveillance and prevention of infectious diseases are the responsibility of each state. The CDC acts as a co-ordinator, adviser and data-gatherer. The ECID could play a comparable central rôle in co-ordinating national and international actions, providing expert advice and collecting information on a broad scale ('European Observatory for Infectious Diseases'). The European potential in terms of surveillance of communicable diseases is already considerable, but requires better co-ordination, which is the aim of the recently created 'European Network for Surveillance and Control of Communicable Diseases'. Hosting this network within the ECID would add considerable value to that initiative.

(iii) **Training.** The teaching activity of the US CDC is considerable and diverse (short- and long-term visits, simple technical information, in-depth theoretical training, etc.) and helps to train people from many countries, giving them a common language and background. The ECID should also facilitate such practical training as well as co-ordinating its activities with existing bodies, such as the European Programme for Intervention Epidemiology Training and national schemes.

## ● Links with developing countries

One of the priorities of the ECID should be to create strong links with developing countries, through equal partnerships between institutions. From this perspective, the training activity of the ECID should be strongly focused on relevant infectious disease problems. This is not only humanitarian, but it would also combat emerging infectious diseases where they arise, protecting other countries (especially Europe) in a cost-effective manner.

## ● Administrative status and involvement of European countries

Close links with the EU and WHO are essential, but the scope of this proposal exceeds the limits of the European Union and should involve non-EU European countries, particularly Eastern Europe and the former USSR. It is to be hoped that it could achieve international status comparable with the European Molecular Biology Organization, the

European Space Agency or the European Centre for Particle Physics (CERN).

## ● The future

The recommendations resulting from the Montpellier meeting were: first, a more structured proposal is to be prepared within the next 6 months, led by Michel Tibayrenc; second, the present board of advisers is to be broadened, to include epidemiologists and public health practitioners active in Europe; third, the project is to be discussed extensively at the Congress of the European Society of Clinical Microbiology and Infectious Diseases, Berlin, March 1999; finally, additional official support is to be sought from other scientific societies.\*

● *Professor Jean-Claude Piffaretti is President of the Swiss Society of Microbiology, Istituto Cantonale Batterioserologico, Via Ospedale 6, CH-6904 Lugano, Switzerland  
Tel. +41 91 923 25 22  
Fax +41 91 922 09 93*

\* *Editor's note: ECID has the support of the Swiss Society of Microbiology, the Turkish Microbiological Society and the European Society of Clinical Microbiology and Infectious Diseases. The SGM has not yet been approached formally to support this initiative.*