**Vets and Medics Working Together**

In the past, research on zoonotic diseases in Europe has been notoriously fragmented with a major division between researchers in human and veterinary medicines. This division is emphasised by a definite separation in education, training, research institutes and funding streams between these two fields. To some extent, this is enhanced by the lack of joint ownership of the public health problems related to zoonoses. For example, some microbes that cause diseases in humans, such as *Campylobacter jejuni* or *Escherichia coli* O157, have few or no obvious clinical consequences in the animal host and therefore any control strategies, though essential to protect public health, are of little veterinary or agricultural industry benefit.

Fragmentation also occurs within the medical and veterinary sectors with lack of collaboration, and even competition, between different scientific disciplines, sectors in food production, and even between different aspects of the same disease agents. These issues generate a unique challenge in sharing scientific knowledge and building cross-disciplinary teams with common goals.

Med-Vet-Net aims to provide a foundation for greater collaboration between medical and veterinary researchers in Europe. The collaborative expertise available within Med-Vet-Net includes the doctors and medical scientists identifying the human diseases, the epidemiologists and risk analysts who establish links with animals, the microbiologists who confirm those links and the veterinary and food scientists responsible for the control and prevention of the risks. It is hoped that such a multi-disciplinary approach will enable knowledge to be shared across regional, national and international borders.

Within the Med-Vet-Net partnership, we have a variety of examples of collaboration across the medical-veterinary divide. In some countries, for example the UK, Denmark and The Netherlands, both the national public health and national veterinary institutes, have well-developed and active research collaborations. Such collaborations (see below for examples) could act as models in those countries with identifiable national public health and veterinary laboratories. However, in other countries, there may be no clearly defined national laboratories, and public health and veterinary research is undertaken by a wide range of institutes including universities. In such countries, alternative models for collaboration may be required. For example, one of these institutes, which is likely to be a reference laboratory, may act as the hub of a national knowledge network within specific disease topics. Of course, for some disease topics, co-ordination of activities at the European level, would be by the Community Reference Laboratory but such topics are relatively few and many zoonotic diseases would not be represented in such a model.

**Denmark**

The Danish Institute for Food and Veterinary Research (DFVF) was formed in 2004 by the merger of the Danish Veterinary Institute and the Danish Food and Veterinary Administration. It is a Governmental research institute under the Ministry of Family and Consumer Affairs. Its parallel institute is the Statens Serum Institute (SSI), which is an enterprise under the Danish Ministry of the Interior and Health. SSI’s duties are partly integrated into the national Danish Health Services. These two institutes are the main collaborators in the Danish Zoonoses Centre - a collaboration, which has been highly successful in combating zoonoses in Denmark. Evidence of the success of this collaboration is demonstrated, by numerous research collaborations, weekly meetings of epidemiologists and microbiologists from the two institutes (outbreak detection and response group), quarterly meetings of an inter-agency zoonoses coordination group (the coordination group of the centre), and the publication of a joint national Annual Report on Zoonoses in Denmark each since 1994 (www.dvf.dk). A recent and topical example of this national research collaboration is a publication by Wingstrand *et al.* in the February Issue of Emerging Infectious Diseases (www.cdc.gov). Both the SSI and DFVF continue to extend their collaboration to other EU states through their involvement in Med-Vet-Net.

**United Kingdom**

The Veterinary Laboratories Agency in the UK (VLA) is an Executive Agency of the Department for Environment, Food and Rural Affairs (DEFRA). The VLA provides all sectors of the animal...
Med-Vet-Net People - Institute Reps

Kåre Mølbak: Institute Representative SSI

Dr Kåre Mølbak is 50 years old and graduated from the medical faculty of the University of Copenhagen in 1985. After basic training in clinical infectious diseases, Kåre held research positions in connection with the Bandim health research project in Guinea Bissau and at several departments at Statens Serum Institut (SSI). In 1996, he became “zoonosis epidemiologist” at SSI, and functioned for some years as a “liaison officer” between the DFVF and SSI. In 2001/2002 he was a visiting scientist at the Foodborne and Diarrheal Diseases Branch at the Centers for Disease Control and Prevention in Atlanta. Currently, he is the State Epidemiologist for Infectious Diseases in Denmark. His particular areas of interest are the emerging problems of foodborne zoonotic gastrointestinal infections and antibiotic resistant bacteria transferred from food animals to humans. He also has an interest in surveillance methodology, outbreak management and longitudinal studies of infectious diseases. Dr Mølbak has published more than 120 papers in peer-reviewed journals, primarily on the epidemiology of gastrointestinal infections and other communicable diseases. In addition, he has been author of book chapters and invited as a speaker at a number of international conferences, the organizer of international workshops, and the coordinator of large WHO and EU funded research programmes.

Johan Bongers: Institute Representative CIDC-Lelystad

Johan is Head of Staff at CIDC and he has been involved in Med-Vet-Net from the beginning (Expression of Interest FOODVETNET). He is a veterinary microbiologist who worked for several years in the Regional Animal Health Centre in Southern Netherlands before joining ID-Lelystad and later CIDC Lelystad. He began working at Lelystad in 1994 where he worked in the department of bacteriology, was head of the department for evaluation of veterinary medicines and head of staff at ID-Lelystad before starting his current position in 2002. He is currently involved in creating a similar Network of Excellence, EPiZONE that’s directed towards prevention and control of epizootic diseases and will start in May 2006.

Kumar Sivam: Institute Representative VLA

In this role Kumar chairs the VLA activity team comprising lead scientists and other specialists working on Med-Vet-Net as well as representing VLA on the Co-ordinating Forum. Kumar is also involved in other EU work. He is Co-ordinator of the Small Ruminant TSE Network and takes an active interest in EU funding opportunities for VLA. In addition to this, Kumar is taking the lead in aspects of VLA’s development of data sciences and knowledge management. In his previous roles at VLA he was Resource Centre Manager of Centre for Epidemiology and Risk Analysis (CERA) and work group leader of the Scrapie Epidemiology Group. He joined VLA almost five years ago coming from a varied background in veterinary clinical practice, business and overseas development work.

About eight years ago, the VLA and HPA established an ad hoc collaborative discussion group, targeted at foodborne zoonoses, under the direction of John Threlfall and Diane Newell. The links between the VLA and the HPA were formalised in 2000, with the production of a Memorandum of Understanding (MoU) between the two organisations, promoting joint work in defined areas. This MoU was revised in 2004, with the inclusion of additional pathogens of interest and new areas of collaboration. The collaborative group meets once or twice per year and has even organised a joint national and international meeting on zoonoses for stakeholders. The group actively encourages collaborative research and supports the submission and implementation of joint grant proposals to DEFRA and the Food Standards Agency. Joint projects on Salmonella and Campylobacter epidemiology and E. coli O157 have been undertaken. Most recently both the HPA and VLA have invested in the generation of a joint fellowship for three years. This joint fellow is based in both institutes and shares her time between them. Both the HPA and VLA also have regional laboratories with surveillance responsibilities and over the last few years’ regional groups, which also include Communicable Disease Consultants, have been developed to ensure local communication between public health and veterinary scientists, especially on outbreak investigations.

In 2001, the UK Zoonoses Group was formed to provide a high level forum for the discussion of animal and human health aspects of zoonoses and their control and covers the whole of the UK (www.defra.gov.uk/animal/diseases/zoonoses/zoonoses_reports/). About eight years ago, the VLA and HPA established an ad hoc collaborative discussion group, targeted at foodborne zoonoses, under the direction of John Threlfall and Diane Newell. The links between the VLA and the HPA were formalised in 2000, with the production of a Memorandum of Understanding (MoU) between the two organisations, promoting joint work in defined areas. This MoU was revised in 2004, with the inclusion of additional pathogens of interest and new areas of collaboration. The collaborative group meets once or twice per year and has even organised a joint national and international meeting on zoonoses for stakeholders. The group actively encourages collaborative research and supports the submission and implementation of joint grant proposals to DEFRA and the Food Standards Agency. Joint projects on Salmonella and Campylobacter epidemiology and E. coli O157 have been undertaken. Most recently both the HPA and VLA have invested in the generation of a joint fellowship for three years. This joint fellow is based in both institutes and shares her time between them. Both the HPA and VLA also have regional laboratories with surveillance responsibilities and over the last few years’ regional groups, which also include Communicable Disease Consultants, have been developed to ensure local communication between public health and veterinary scientists, especially on outbreak investigations.

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A unique opportunity is offered for a 3-year PhD studentship to work within Med-Vet-Net. The studentship will be based at the Veterinary Laboratories Agency (VLA), Surrey, UK and will work on Q fever under the supervision of Dr Sally Cutler and Professor Diane Newell. The epidemiology of Q-fever caused by *Coxiella burnetii* in Europe is largely unknown. This is because methods for surveillance are limited and those available are neither standardised nor harmonised. Improved detection, diagnosis and typing methods are required, in both humans and livestock, to enable source identification, disease tracking and comparability of prevalence data across Europe. The opportunity for the development of novel techniques may arise from the recently published and ongoing genomic sequencing.

The successful candidate should have strong communication skills and be prepared to work in the European context and travel within Europe. They should also have a proven background in molecular microbiological methods and tissue culture techniques. *Coxiella burnetii* is located at Wageningen University Research Centre (WUR) and is responsible for the prevention and control of notifiable infectious animal diseases. Researchers in the Animal Sciences Group (ASG), also based at WUR, are additional partners in Med-Vet-Net. Recently a coordinating centre for zoonoses has been established by the Dutch Food and Consumer Product Safety Authority and the RIVM. The aim of this centre is to coordinate all the expertise in the field of zoonoses of the different institutes. The participation in Med-Vet-Net by the RIVM and CIDC-Lelystad/ASG is an additional and important means of collaboration, both in research activities and communication on zoonoses at the European level.

The examples above clearly demonstrate the range of collaborations that can be developed between public health and veterinary institutes within individual countries and that the entrenched barriers to communication can be overcome. In each case these collaborations have grown to generate common goals, understanding and even successful outputs like joint research projects, meetings, publications and comprehensive national reports. In at least one case, personal networking among a small group of scientists with common interests in food-borne diseases and enthusiasm to share knowledge have grown to generate a formal collaborative agreement between two major research institutes. The challenges to public health and veterinary research collaboration in some countries remain significant. Over the next few years Med-Vet-Net will aim to encourage and enable such collaborations by developing model collaborative systems that can be adapted to a variety of national structures and hopefully by demonstrating the measurable successes of such collaborations.
MED•VET•NET
EXPRESSIONS OF INTEREST
SCIENCE COMMUNICATION INTERNSHIP

As part of its overarching ‘Spreading Excellence’ Workpackage 3, Med-Vet-Net is offering four positions for a Science Communication Internship. The Internship is open to any current student, researcher or staff member of the Med-Vet-Net partner institutes. The Internship will consist of a 3-month period of full-time training / tutorials in various aspects of science communication including:

• Communicating with government and industry
• Communicating with the media
• Presentation skills
• Internet and website design
• Writing skills and publications
• Communicating with the public and children
• Organising events and exhibitions

Following completion of the 3-month period, it is expected that participants will return to their Institute and apply the skills learnt by communicating the work of Med-Vet-Net in their country, as well as assisting the Med-Vet-Net Communications Unit with the dissemination of information throughout Europe.

During the Internship, the candidates will be mainly located for 12 weeks at the offices of the Society for Applied Microbiology in Bedford, UK, with some additional travel throughout Europe to other partner institutes and Brussels. Accommodation, travel and associated expenses will be provided.

It is anticipated that the second 3-month Internship will run from September - November 2006.

A Genomics approach to host-pathogen interactions
EADGENE coordinates a genomics approach to the development of new or improved therapeutics and vaccines, improved diagnostics, and the breeding of farm animals for disease resistance. By concentrating on pathogens of importance in the food chain this research will impact upon human health and lifestyle choices.

Structure of EADGENE
EADGENE is structured into four activities and 21 work packages. Integrating Activities is achieving durable access to facilities, resources, software, tools and knowledge by: the creation of a virtual lab through sharing of biological, technological, bioinformatic and analytical resources and facilities; consolidation of the partner organisations; facilitating staff mobility; and integration of knowledge. This activity is coordinated by Prof. Stephen Bishop at the Roslin Institute.

Research Activities are focusing and augmenting research on host-pathogen interactions relevant to animal and human health, including host-pathogen interaction studies of: mastitis in cattle, goats and sheep; Salmonella in pigs and poultry; and E. coli in poultry. The research activities are coordinated by Prof. Mari Smits at ID-Lelystad.

Spreading of Excellence Activities ensure that knowledge, outcomes and training opportunities are transferred to scientists, industry and the general public by means of: a Technology Transfer working party; a Knowledge Management working party; external dissemination of information; communication with society; staff training programmes; and a “Club of Interest” for industry. This activity is led by Mrs Anne-Marie Neeteson of the European Forum of Farm Animal Breeders (EFFAB).

Management Activities ensure the efficiency of the Network through an effective management structure. The management of EADGENE is coordinated by the lead-partner, INRA, under the leadership of Dr Marie-Hélène Pinard-van der Laan.

For further information please visit www.eadgene.org and www.eadgene.info
Project Management

Visit to DG SANCO
As part of the Med-Vet-Net commitment to advise our stakeholders, on 16 January 2006, Diane Newell presented the overall structure and progress of Med-Vet-Net to representatives from DG SANCO in Brussels. In addition, Arie Havelaar (cost-benefit analysis and priority setting) and Pascal Borieu (Trichinella) gave reviews on their respective current and future workpackages. Andre Jestin also attended this meeting. Both areas were of major interest to DG SANCO at this time. The meeting was a great success and, with an improved understanding of our work, DG SANCO will hopefully maintain the contacts made and we look forward to seeing them at our meetings in the future. We thank Jean-Charles Caveltte (DG Research) for organising this meeting and Eric Pouddelet, Head of Unit for hosting the meeting.

Final Workpackage Reports
The first tranche of workpackages (WP5, 7-14) will be completed by the end of February. The reports must be completed within the following four weeks. The Workpackage Leaders will be receiving instructions as to the format required by the end of January. It is therefore essential that all relevant information is sent to the Workpackage Leaders in time. It is also important that all members of these Workpackages have reviewed and agreed the final reports, so please make sure that you are available to help and communicate with your Workpackage Leader over the next few weeks. These reports will be collated into a document, which will be referred by the Co-ordinating Forum and then presented to the Advisory Panel and Governing Board. Executive summaries of each Workpackage will be incorporated into the next annual report for submission to the EC in September.

New Workpackages
The new workpackages (WP 21-31) are due to start on 1 March 2006. It is the responsibility of all workpackage members and their Institute Representatives to ensure that the resources are in place by that time and that they are ready to sign the subcontracts once they are sent by the Administration Bureau.

Working Together
“Living together requires armfuls of love and a pinch of humour” Roger Ethegaray.
The goodwill associated with the Christmas holidays usually rapidly disappears by mid-January. In this final part of our first 18 month joint programme of activities, there are many plans reaching fruition. In particular there are final reports and training courses/workshops to complete in the next few weeks. Things are bound to occasionally go wrong. This is unsurprising in a network involving over 300 people with 10 languages, cultures and nationalities! Without doubt the biggest problems are associated with clarity of communication and lack of understanding. This year, the Project Management and Communications Units are intending to work towards improving communications both among ourselves and with our stakeholders. The strategy will be to:
• encourage Workpackage leaders to improve communications with Workpackage members and Project Management by means of regular electronic updates
• ensure that our written common language (English) is clear.
To this end we ask that, wherever possible, any formal documents in English associated with Med-Vet-Net (particularly those with instructions/information or going outside the network to stakeholders) are sent to the Communications Unit or Project Management Office for checking before distribution. Hopefully with such an enhanced flow of information, plus goodwill, trust and humour, working together will become easier.

Hot off the Press
Several Med-Vet-Net partners have been selected for recommendation as new Community Reference Laboratories (CRL) by DG SANCO in various zoonoses-related topics. These partners include:
- AFSSA for Brucellosis, Listeria and Staphylococcus
- ISS for E. coli and parasites
- SVA for Campylobacter
- DFVF for antimicrobial resistance
We congratulate them all, and hope that Med-Vet-Net can support their future European work in these areas.

Let’s Talk! Med-Vet-Net Discussion forum
The Med-Vet-Net discussion forum is available for all your comments on the Med-Vet-Net private website. Anyone in the network with access to the private website can use the forum to share ideas, ask questions and find out more information about the network. At the moment, the forum is divided into sections devoted to discussion on each thematic area. There are also pages containing discussion on Workpackage management and Communications. We would like to encourage everyone to add topics which they think are important for discussion amongst members of the network. To use the forum, log into the private website (https://www.medvetnet.org/membersite/) and click on the menu on the left side of the page called ‘Discussion forum’. From here you can view all the current discussions. To take part in the discussion you must log into the forum by clicking on ‘log in’ at the top of the page. Now you are ready to begin your discussion! Good luck, we look forward to talking with you all!
Med-Vet-Net Legal status and sustainability
The study to investigate options for the future legal status of Med-Vet-Net is being undertaken, as described in the November 2005 and December 2005 newsletters, by consultants from Santexcel. This is the beginning of an important initiative, which will determine the future of Med-Vet-Net and hopefully enable the continuation of our network for many years.

The first phase of this study will identify the type of the current legal status of each partner institute using an electronic survey approach. In addition Santexcel has initiated direct contact with some partners to expand on this information, and in early January visited the VLA to meet with its directors. This information will be collated into an intermediary report comprising an inventory of the legal status of all partners including the degree of autonomy in terms of decision-taking and financial management. Such information is essential to the type of legal status that Med-Vet-Net might adopt in the future. With this information Santexcel will list the potential options, which may be considered by the Governing Board.

Thus it is important that the information obtained accurately reflects the current status of all partners.

In the second phase of the study these options will be discussed in relation to the common vision and strategy for the future of Med-Vet-Net following the currently planned lifespan of the network.

Clearly there are other important aspects of sustainability to take into consideration to ensure a successful future for our Network. These particularly include sustainability of funding and collaboration to provide the resources to continue integration activities and active research at the international level. Approaches to this are currently under development by a joint subcommittee from the Co-ordinating Forum and the Governing Board, under the chairmanship of Andre Jestin. Your contributions to this debate are actively encouraged and any suggestions should be sent to your Institute Representative or placed on the website discussion page.

Co-ordinating Forum and Governing Board meetings in 2006
The two Co-ordinating Forum meetings for 2006 have been planned. The next meeting will take place in Madrid at the National School of Health on 11 April and will be jointly organised by ISCIII and the Administration Bureau. The autumn meeting (date to be agreed) will be in Budapest at the Hungarian Academy of Sciences, and VMRI will take care of local organisation. The plans for the Governing Board meetings are under discussion.

Applications of Reverse Genetics of Viruses, Birkbeck College, London, UK 3 February 2006
Topics covered include:
- Morbillivirus-Host Interactions
- Reverse genetics of pneumoviruses
- The development and application of flavivirus reverse genetic systems
- Recombinant Sendai virus as gene transfer agent
- Preparing for the inevitable – pandemic influenza
- Manipulation of virus genomes to elucidate
- Rational attenuation of a morbillivirus

The International Conference on Emerging Infectious Diseases, Atlanta, Georgia, USA 19-22 March 2006
The conference brings together public health professionals to encourage the exchange of scientific and public health information on global emerging infectious diseases issues. Major topics include current work on surveillance, epidemiology research, communication and training, bioterrorism, and prevention and control of emerging infectious diseases, both in the United States and abroad. ICEID2006 would be a great opportunity to share your research with the scientific community. Please visit http://www.iceid.org

International Symposium on Emerging Infectious Diseases, Atlanta, Georgia, USA 22-24 March 2006
Major themes of the symposium include:
- The Convergence of Human and Animal Health
- Threats and Challenges Facing Human and Animal Health
- Lessons Learned from Past
- Opportunities for the Future
- Risk management and Communication
For more information please visit: http://www.isezconference.org/

Infectious Disease Research Network (IDRN) Courses in Methods in Molecular Microbiology
Royal Free & University College Medical School, Hampstead Campus, London 24 March-3 April 2006
The course will include a day of practical demonstrations as an introduction to basic molecular techniques for medical microbiology, a three day hands on course using essential molecular methods, and a one day seminar series on the application of molecular techniques in infectious diseases. Please visit: http://www.idrn.org/researchworkshops.php

International Symposium on Salmonella and Salmonellosis Saint Malo, France 10-12 May 2006
Major themes of the symposium include:
- Detection, identification, typing
- Interactions between hosts and bacteria
- Immune response
- Ecology and animal epidemiology
- Ecology and public health
- Antimicrobial resistance

- Control and risk assessment
Please visit: http://www.zoopole.com/ispaia/ls2006/org_en.php

Third International Conference on Antimicrobial Agents in Veterinary Medicine (AAVM) Orlando, Florida, USA 16-20 May 2006
The topics of the meeting are:
- Pharmacokinetics and Pharmacodynamics
- Antimicrobial susceptibility and resistance
- Clinical research and therapy
- Antibiotic treatment of mastitis
- Analytical methods and techniques
- Environment, food safety and regulatory aspects
- Future of antimicrobial therapy
Please visit: http://www.aavm2006.com

106th General Meeting of the American Society for Microbiology Orlando, USA 21-25 May 2006
This conference will be held in the Orange County Convention Center in Orlando. The scientific program will feature nearly 300 individual colloquia, symposia, roundtable discussions, award lectures, and poster sessions.

For more information please visit: http://www.asm.org/7200.shtm

4th International Veterinary Vaccines and Diagnostics Conference (IVVDC) Oslo, Norway 25-26 June 2006
The conference provides an excellent opportunity to meet-colleagues and be updated on recent progress and future perspectives in the fields of vaccinology and diagnostics.

The IVVDC has become an important meeting place for regulatory authorities, pharmaceutical companies and the scientific community.

Please visit: http://www.vetinst.no/inet_eng/index.asp?strUrl=10021471&topExpand=8&uExpard=2
2nd Annual General Meeting on Zoonoses Research in Europe
3 - 6 May 2006, Malta

The aim of this meeting is to promote current and new findings on zoonotic research from clinical and veterinary perspectives.

Call for scientific abstracts:
Abstracts are invited on aspects of zoonoses in the following topic areas:
- Epidemiology & Risk Research
- Host-Pathogen Interactions & Microbial Ecology
- Detection & Control
- Orphan/New & Emerging Zoonoses

Deadline for submission of abstracts: 15 March 2006

For more information visit: http://www.medvetnet.org/mvn_conf06/