special events

The World Organisation for Animal Health (OIE) hosted the first International Symposium on Animal Genomics for Animal Health at its Paris headquarters

OIE Headquarters, 23 to 25 October 2007

The symposium provided an excellent opportunity for world leaders in the field of animal genomics and animal health to come together and plan new directions to change the way animal health research is approached, with the availability of full genomic sequences for several livestock species.

Recent advances in biotechnology and the genomics of livestock species present unique opportunities to address global animal health challenges through multidisciplinary scientific collaborations.

The main highlights of the symposium concerned interactions between the genomes of pathogens and their hosts, the prospect of improved methods to control and eliminate diseases through the development of new diagnostics, vaccines and biotherapeutics, and the potential of being able to select livestock with desirable health traits.

Vaccination, when available, is undoubtedly the most cost-effective means of preventing, controlling and eradicating infectious diseases of humans and animals, as exemplified by the foreseen eradication of rinderpest.

Vaccination will help to reach many of the objectives contained in the United Nations ‘Millennium Development Goals report – 2005’, especially in light of the livestock revolution, with world demand for meat expected to rise by 50% over the next fifteen years. It is estimated that one billion people will shift from poverty to the middle classes, becoming meat consumers.

One approach could lie in the selection of animals that respond well to vaccination.

In fact, there is a growing trend to orient livestock selection not only towards production, but also towards animal health objectives by selecting animals resistant to certain diseases.
Keeping this in mind it is becoming urgent to maintain the biodiversity of domestic animals, and the OIE fully supports the initiative of its sister organisation, the Food and Agriculture Organization of the United Nations (FAO) to promote and preserve the diversity of domestic breeds in both developed and developing countries.

There are also many applications of animal genomics in animal welfare. Whenever a disease is prevented, this has a direct positive impact on animal welfare. Indeed, animal health is a key component of animal welfare.

Two hundred and sixty-five experts from around the world participated in this first, important symposium, paving the way for the future.

The symposium proceedings will be published by the International Association for Biologicals.