

## **ERA-NET PathoGenoMics outlines necessary progress in the field of anti-infectives**

The EU should strive to standardize and synchronize research tools and nomenclature, promote networking and update science and patenting-related legislation – these were some of the main conclusions in the recently published Strategy Paper on "Pathogenomics, Innovation and Public Health", prepared by ERA-NET PathoGenoMics.

The need to compose the Strategy Paper stems from the crisis that the field of anti-infective drugs is in, as indicated by three major parameters: drug-resistant pathogens, which are constantly evolving, a near standstill in the development of new antibacterial agents and a dearth of reliable diagnostic and monitoring tools for infectious diseases. All three factors complicate treatment and diminish its efficiency.

High throughput methods, such as genomics and proteomics are some of the most important tools for generating new drugs and diagnostic tools as well as much needed vaccines. However, while helping to propel the field forward, these approaches generate overwhelming amounts of data that have yet to be properly handled. In addition, the field is hampered by other major technical setbacks, including lack of standardization and collaborations, lack of publicly available, comprehensive databases and lack of legislative groundwork. Technology Transfer Offices (TTOs), whose mediation is crucial for cultivating interactions between academia and industry, seem to be less productive in Europe than their counterparts in the US. Optimizing performance is one way of enhancing commercialization of basic research inventions.

The strategy paper, accessible at <http://www.pathogenomics-era.net>, lays down the academic, industrial and political background underlying research in Europe, and then proceeds to describe in detail innovative, legislative, academic and clinical needs of the pathogenomics field.