

Basel, 21 November 2000

Roche launches a new proteomics initiative to create individualised healthcare solutions

Roche will further strengthen its proteomics research activities with an investment of around 100 million Swiss francs over the next few years. This major initiative will link proteomics research in the Pharmaceuticals and Diagnostics Divisions. Roche will continue to work with external partners to enhance efforts in this critical area even further.

Proteomics, the large-scale parallel analysis of all the proteins which a cell or organ produces under certain environmental conditions (proteome), will contribute greatly to our understanding of gene function in the post-genomic era.

Roche's proteomics research will be concentrated in two research centres: Basel, where a state-of-the-art proteomics research group already exists, and Penzberg, the Group's research centre in Upper Bavaria. Dr Hanno Langen, the biochemist who has headed the Basel proteomics group since 1997, will lead the new research initiative in both divisions.

Proteomics research at Roche combines high-resolution separation techniques applied to complex protein mixtures with state-of-the-art identification methods (mass spectrometry). Thus thousands of proteins can be analysed simultaneously and assigned to the corresponding genes. Roche's research unit is already a leader in the automation of this analytical process.

In diagnostics, the new insights from genomics and proteomics will lead to more specific, highly sensitive tests and provide a way of detecting patient-specific causes of disease. One of the objectives of Roche's proteomics research in diagnostics is to identify proteins that can be used as potential new markers in preclinical and clinical tests for cancer, metabolic disorders, inflammatory disease and cardiovascular disease. These will yield important information on the course of diseases and the efficacy of the drugs administered to treat them.

"Proteomics will contribute significantly to the growth of our diagnostics' business. As a world leader in diagnostics, Roche is ideally equipped to channel the results of genomics and proteomics research directly into the development of specific tests customised to patient needs", notes Heino von Prondzynski, head of the Diagnostics Division.

"Whereas the genome is basically a blueprint, the proteome gives us an insight into how the complex structure we call a human being was built. Like genomics, proteomics will be a vital contributor to a better understanding of the molecular causes of disease, and as such it will be a critical element in the race to bring more effective healthcare to society", says Jonathan Knowles, head of Global Research at Roche.

Headquartered in Basel, Switzerland, Roche is one of the world's leading research-oriented healthcare groups in the fields of pharmaceuticals, diagnostics and vitamins. Roche's innovative products and services address prevention, diagnosis and treatment of disease, thus enhancing people's well-being and quality of life. Research at Roche is focusing on diseases with high unmet medical need in the areas of the central nervous system, genitourinary diseases, metabolic diseases, inflammation and bone diseases, oncology and vascular diseases as well as viral diseases.