

Diagnostic Methods of the New Generation

Molecular diagnosis is a very recent research field and it has become a critical element utilised for research into virus and tumour diseases. **Roboscreen Gesellschaft für molekulare Biotechnologie mbH** is a pioneer in this sector, making use of modern robot technology and developing advanced techniques for the quantification of nucleic acids and proteins.



Roboscreen representatives and visitors, seen here at the company's exhibition stand at the BioTechnica 2003

Roboscreen was established in 2000 by Dr. Thomas Köhler and Dr. Awad Osman in cooperation with Dr. Peter Bendzko and Dr. Timo Hillebrand from Invitek GmbH, a developer of nucleic acid preparation kits. Dr. Thomas Köhler is our interview partner: "I was previously involved in diagnostic research at the University of Leipzig, focussing on molecular

diagnosis. Molecular diagnosis is an important basis for judging prognoses in cancer such as leukaemia, as it helps doctors to determine the results of the chemotherapy. Several target nucleic acid makers have an exciting potential in predicting either poor or good responses to therapy."

Presided over by the main founders, the enter-

prise employs 11 members of staff. Roboscreen's core competence is the development of technologies and molecular products for the standardised quantification of low abundant nucleic acids and proteins, with the goal to establish the standardised measurement of nucleic acids as the industrial standard. "We make use of high-tech robots for the research of clinically relevant parameters", elaborates Dr. Köhler. "As robot technology is very expensive, we receive financial support from two investors."

Roboscreen's core competence is made up of two areas of application. The first area is the nucleic acid quantification sector. In this area the company offers unique technologies for the research of tumour cells, and the development of tests for virus research and diagnosis, for example, AIDS and SARS, and food diagnosis, following the new regulations regarding GMO testing in food set by the European Union, which came into effect in November 2003. "The technology platform is the same in all research areas", stresses the CEO. "We have a major competitor in our market niche, but in

terms of quality, we provide a unique product. Our company was certified in accordance with DIN EN ISO 9001 regulations in July 2003. The certificate is prerequisite for the distribution of the product to clinical diagnostic institutions." Roboscreen's second area of business is recombinant protein and monoclonal antibody production, necessary, for example, for diagnosing BSE. "The prototype of the BSE kit is currently being validated by the European Commission", stresses Dr. Köhler. "Our target group includes universities, research centres, health inspection authorities, laboratories, and biotech companies. In total, we have established a network of some 300 customers. With 60% of our business transmissions being export activities carried out through distributors, and we cooperate with clients in Italy, the UK, USA, and Switzerland." Participating in trade fairs such as the BioTechnica and Analytica, the market-oriented enterprise is well represented in its niche and expects to break even in early 2004.



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