

February 19, 2011

Joint Press Release of the German Cancer Research Center (DKFZ) and Karlsruhe Institute of Technology (KIT)

The German Industry's Innovation Award 2010 for PEPperPRINT

PEPperPRINT GmbH was announced on February 19, 2011 as the winner of the 2010 German Industry's Innovation Award in the category "Start-Up Companies".

PEPperPRINT, a start-up company founded by scientists of the German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ), produces peptide microarrays for research and diagnostics using a novel and low-cost technology.

Numerous biochemical and medical detection methods are based on the use of short chains of amino acids called peptides which are produced synthetically and affixed on the surface of a piece of glass. Such peptide microarrays can be used for identifying pathogens or developing new substances for drugs. Diagnosis of cancers might also be improved with these microarrays. A disadvantage of peptide microarrays has been that their production is time-consuming and costly.

Dr. Volker Stadler (PEPperPRINT), Dr. Frank Breitling (KIT) and Dr. Ralf Bischoff (DKFZ) are co-founders of PEPperPRINT GmbH. Over the past few years they have developed a novel technique that overcomes the technological hurdles in the production of peptide microarrays. The company's name, PEPperPRINT, says it all: The twenty different peptide building blocks are embedded in toner particles and printed on the glass surface using a special 24 color laser printer. This production technology makes it possible to increase the number of peptides per surface by 80 times and reduce manufacturing costs by 50 times. The technology therefore opens up a whole new range of options for research.

This concept was also commended by the jurors of the German Industry's Award 2010. PEPperPRINT was the winner in the category "Start-Up Companies", i.e. companies that have been competing in the market for less than five years. Last Saturday, PEPperPRINT, which started operations in 2010, was presented the prestigious award, which is also the world's first innovation award. Since 1980, the Rhine-Main Industry Club (Wirtschaftsclub Rhein-Main) has annually rewarded Germany's most innovative enterprises with this award.

The 2010 award winners were honored at a festive event at Frankfurt's Congress Center for their outstanding technological, scientific and intellectual accomplishments by Research Minister Annette Schavan, who sponsors the innovation award. "We are very happy and proud of this distinction!" said Volker Stadler after receiving the award. "Of course, there is a lot more to come. Peptide microarrays will become increasingly important for science and we are continuously working to refine our products for new applications," said Frank Breitling explaining PEPperPRINT's business strategy.

In cooperation with the Karlsruhe Institute of Technology (KIT), where Frank Breitling has been working since 2009, production of peptide microarrays will be optimized in the future. Aims include further increasing the number of peptides per microarray while at the same time reducing costs of production – and, thus, of healthcare research. At KIT, one of the leading energy research centers in Europe, projects will also aim to develop peptide microarrays in a modified form towards photovoltaic and fuel cells.

A picture of the PEPperPRINT Team is available on the Internet at:

<http://www.dkfz.de/de/presse/pressemitteilungen/2011/images/pepperprint.JPG>

Picture caption, from left to right: Dr. Ralf Bischoff, Dr. Volker Stadler, Thomas Felgenhauer, Dr. Frank Breitling

Source: Nicole Schuster, DKFZ

The German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ), employing over 2,500 staff members, is the largest biomedical research institute in Germany. More than 1,000 scientists are working to investigate the mechanisms of cancer development, identify cancer risk factors and develop new strategies for better cancer prevention, more precise diagnosis and effective treatment of cancer patients. In addition, the staff of the Cancer Information Service (KID) provides information about this widespread disease for patients, their families, and the general public. DKFZ is funded by the German Federal Ministry of Education and Research (90%) and the State of Baden-Wuerttemberg (10%) and is a member of the Helmholtz Association of National Research Centers.

Karlsruhe Institute of Technology (KIT) is a public corporation and state institution of Baden- Württemberg (Germany). It fulfils the mission of a university and the mission of a national research center of the Helmholtz Association. KIT focuses on a knowledge triangle that links the tasks of research, teaching, and innovation.

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