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30 Years of Meyenburg Foundation – 30 Years of Commitment for Cancer Research

This year's Meyenburg Prize is awarded to Elizabeth Blackburn for her discovery and studies of the telomerase enzyme.

The Award Winner 2006

"The cell's fountain of youth", but also "Achilles' heel of the tumor" – this is how the telomerase enzyme was dubbed by the press. **Professor Dr. Elizabeth Blackburn**, jointly with a colleague, was the first to describe telomerase in 1985. The newly discovered enzyme specifically extends the chromosome ends, called telomeres. This job, though it may sound unspectacular for the layperson, prolongs a cell's life span. Every cell division shortens the chromosome ends a bit. If telomeres get shorter than a certain minimum length, then the cell stops dividing. Telomerase adds new DNA pieces to the chromosome ends after division, thus counteracting the aging process of the cell.

In the human body, detectable amounts of telomerase are found only in cells that continuously renew, such as in hair and mucous membranes, in the blood forming system, or in germ cells. Things are different in cancer cells, which are generally characterized by high levels of telomerase. The enzyme promotes the growth properties of a tumor. The life span of healthy cells was also found to be prolonged after they had been equipped with telomerase in laboratory experiments. Elizabeth Blackburn recognized a long time ago that telomerase is a central and key target of almost every cancer cell. She demonstrated that cancer cells respond to inactivation of the enzyme by stopping to grow. Presently, the first specific telomerase inhibitors are already being tested in large-scale phase III clinical trials to determine their effectiveness against cancer.

Australian-born Blackburn, who works at the University of California in San Francisco, has already been bestowed a multitude of highly regarded awards for her work, including this year's Albert Lasker Award for Basic Medical Research.

The Meyenburg Foundation

In 1975, **Maria Meyenburg**, widow of leather manufacturer Wilhelm Meyenburg from Krempe in the German state of Schleswig-Holstein, decreed in her will that a foundation be established in support of the German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ). This year, the Meyenburg Foundation celebrates its 30th anniversary. In addition to the sizeable Meyenburg Prize, which has been awarded annually since 1981, the foundation operates a guest house for foreign scientists in Heidelberg and supports a lecture series with renowned scientists from the field of cancer research.

At the award and anniversary ceremony, **Professor Dr. Werner Franke**, winner of the first Meyenburg Prize and head of the Division of Cell Biology at the DKFZ, will honor the work of the foundation. Foundation President **Dr. Marion Meyenburg** will present the prize, which is currently worth 40,000 euros and is awarded for outstanding achievements in cancer research, to Elizabeth Blackburn.

The fact that the foundation's selection committee has a good feeling for nominating prize recipients and awards the prize to the best of the best is proven, not least, by the 2002 Meyenburg Prize winner, **Andrew Fire**: Like a few years before in Heidelberg, now the

Stockholm committee has found the scientist prize-worthy and has awarded the Nobel Prize for Medicine to him.

The award ceremony will take place on **Thursday**, **October 19**, **2006 at 3 p.m.** in the auditorium of the DKFZ. Guests interested in the event are very welcome.

The task of the Deutsches Krebsforschungszentrum in Heidelberg (German Cancer Research Center, DKFZ) is to systematically investigate the mechanisms of cancer development and to identify cancer risk factors. The results of this basic research are expected to lead to new approaches in the prevention, diagnosis and treatment of cancer. The Center is financed to 90 percent by the Federal Ministry of Education and Research and to 10 percent by the State of Baden-Wuerttemberg. It is a member of the Helmholtz Association of National Research Centers (Helmholtz-Gemeinschaft Deutscher Forschungszentren e.V.).

This press release is available at www.dkfz.de/pressemitteilungen

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