

**“Lab Driving License” from the Heidelberg Life Science Lab**

**The “Thinking and Experimental Laboratory” will be officially opened on May 2, 2012 as a new offering of the Heidelberg Life Science Lab. The German Cancer Research Center (DKFZ) provides a fully equipped laboratory room with twelve workplaces for this venture.**

The new experimental lab is open to participants of the Heidelberg Life Science Lab as well as external secondary school students. “We offer programs at three different levels,” explains Lab leader PD Dr. Rüdiger Arnold (Associate Professor). “For a start, students can acquire what we call a ‘Lab Driving License’ by attending a basic course in methods of molecular biology, cell biology and biochemistry.” Students who are particularly interested may continue at a second level by attending a more specialized practical course in a subject of their choice such as tumor biology. As a rule, courses are held at weekends and during holidays.

The third user group of the “Thinking and Experimental Laboratory” are the working groups of the Life Science Lab, which now at last have their own lab for long-term project work. Students of the working group “Synthetic Biology” are particularly committed workbench users right now. The young researchers are working with standardized gene building blocks to engineer an artificial bacterium that warns against carcinogenic UV and X-ray radiation. The bacteria indicate DNA repair activity and, thus, intensity of radiation exposure via a color signal. The plan is to integrate them as living radiation sensors into a piece of jewelry to be worn on the skin. This working group is the first high school student team from Germany to take part in the international iGEM High School Competition by the Massachusetts Institute of Technology in Boston, U.S.A.. “This is really an outstanding high school student project,” says Arnold, “which shows the scope of what Life Science Lab participants can achieve working on their own.”

“Like all other programs of the Life Science Lab, the new ‘Thinking and Experimental Laboratory’ is not an education program targeted at a broad high school audience but rather a long-term education program for individual students. This is also why we do not offer any one-day routine events for whole school classes,” says Arnold.

In the Thinking and Experimental Laboratory, students prepare contributions for the “Jugend forscht” competition. Moreover, the ‘Lab Driving License’ is a qualification for further practical research courses at science institutions. “This is an ideal possibility of attracting gifted youth into research,” says Prof. Dr. Josef Puchta, Administrative-Commercial Director of DKFZ. “The resources that we have spent on the equipment of the laboratory are an excellent investment into the early support of young scientists.”

External secondary school students who are interested in one of the courses are welcome to contact Dr. Rüdiger Arnold or Dr. Katrin Platzer:

Contact to the ‘Thinking and Experimental Laboratory’ and Heidelberg Life Science Lab:  
[r.arnold@dkfz.de](mailto:r.arnold@dkfz.de) and  
[k.platzer@dkfz.de](mailto:k.platzer@dkfz.de)

Postal address:  
Im Neuenheimer Feld 581  
D-69120 Heidelberg  
Germany

Phone ++49 (0)6221-421400

A picture for this press release is available at:

<http://www.dkfz.de/de/presse/pressemitteilungen/2012/images/HLSL-labor.jpg>

Source: Rüdiger Arnold, German Cancer Research Center

The German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ) with its more than 2,500 employees is the largest biomedical research institute in Germany. At DKFZ, more than 1,000 scientists investigate how cancer develops, identify cancer risk factors and endeavor to find new strategies to prevent people from getting cancer. They develop novel approaches to make tumor diagnosis more precise and treatment of cancer patients more successful. Jointly with Heidelberg University Hospital, DKFZ has established the National Center for Tumor Diseases (NCT) Heidelberg where promising approaches from cancer research are translated into the clinic. The staff of the Cancer Information Service (KID) offers information about the widespread disease of cancer for patients, their families, and the general public. The center is a member of the Helmholtz Association of National Research Centers. Ninety percent of its funding comes from the German Federal Ministry of Education and Research and the remaining ten percent from the State of Baden-Württemberg.

Dr. Stefanie Seltmann  
Head of Press and Public Relations  
German Cancer Research Center  
Im Neuenheimer Feld 280  
D-69120 Heidelberg  
T: +49 6221 42 2854  
F: +49 6221 42 2968  
[presse@dkfz.de](mailto:presse@dkfz.de)