


Using optogenetics to visualize histone H2AX phosphorylation in living cells with high precision

<p><b>Project partners</b></p>	<p><b>Flourish with Seed Money</b>          For the second time, researchers and teachers at the five Eucor universities can apply for funding – an example from Biology          Freiburg, Jul 12, 2018</p> <p>Freiburg biology professor Barbara Di Ventura is working with a colleague from the University of Strasbourg on a research project currently financed with Seed Money, a fund for Eucor universities. The team is developing light-sensitive antibody fragments known as nanobodies, and with their help is researching a protein in living cells. In the long term it is hoped that this research will help us better understand the role of the protein in repairing DNA, which could give rise to new possibilities for the treatment of cancer. Sarah Nieber asked Professor Di Ventura how the Seed Money funding supports the team.</p>  <p>Seed Money provides a boost: Barbara di Ventura uses the funding amongst other things to finance pipettes, petri dishes and travel expenses. Photo: Jürgen Gocke</p> <p>Article about the project on the website of the University of Freiburg</p>
<p>Universities of Freiburg and Strasbourg</p>	
<p><b>Project duration / Awarded funding</b></p>	
<p>01.02.2018 – 01.11.2019 / 34.200 €</p>	
<p><b>Short description of the project</b></p> <p>This team of biologists is developing a light-sensitive form of a nanobody that specifically binds to the phosphorylated H2AX protein and analysing it in living cells. The aim is to better understand the role that this post-translational modification plays in DNA repair.</p>	
<p><b>Concrete implementation of the project</b></p>	
<p>In the laboratory the team worked with living cells that they cultivated, and with DNA constructs that they had to clone. They needed enzymes, specific reagents, pipettes, petri dishes, test tubes and a whole lot more. The team used most of the funding for this.</p> <p>The team also meet regularly in Freiburg or Strasbourg and so they had a budget for travel expenses.</p>	
<p><b>Project results and continuation of collaboration</b></p>	
<p>Currently the team is writing a publication about the results obtained with this project. Once the paper is accepted for publication, the team will think of applying for another grant to continue this very successful collaboration.</p>	
<p><b>Further information</b></p>	
<p><a href="#">Article on the website of the University of Freiburg</a></p>	