

Deutsches Primatenzentrum GmbH (DPZ)
Leibniz-Institut für Primatenforschung
Kellnerweg 4
37077 Göttingen
<http://dpz.eu>



Press release

Inaugural lecture: Giving heart failure the boot

Rabea Hinkel is a joint professor for Laboratory Animal Science at the University of Veterinary Medicine in Hannover and the German Primate Center in Göttingen

Göttingen, 5 November 2018. Federal Statistical Office reports indicate that heart failure is one of the leading causes of death in Germany. At risk are those with high blood pressure or diabetes. Rabea Hinkel wants to find out how these risk factors affect heart failure and aims to develop novel therapies. In July 2018, the veterinarian with her focus on cardiology became the professor for Laboratory Animal Science at the University of Veterinary Medicine Hannover (TiHo) and the German Primate Center (DPZ), where is also the head of the Laboratory Animal Science Unit. In her inaugural lecture, entitled: "Translational research in cardiology – a real matter of the heart" Rabea Hinkel talks about how her research aims to help develop new therapies for heart disease. The public event will take place on Monday, 19 November 2018 at 5.15 p.m. in the lecture hall of the German Primate Center, Kellnerweg 4, in Göttingen. Visitors are welcome.

The heart is the vital propeller of our blood circuit. It beats around 60 to 80 times per minute and when exerted, even more. As a result of the reduction in the pumping capacity of the heart, less blood and therefore less oxygen and nutrients are transported through the body. This results in a decrease of physical ability, fatigue, shortness of breath, water retention and in the later stage of the disease, it can result in organ damage such as the liver, kidney or digestive tract and finally the cardiac death. Heart failure is difficult to treat and in most cases a heart transplant is required. Patients suffering from high blood pressure, diabetes or elevated blood lipid levels are at a higher risk and this is where Rabea Hinkel's research is put to use.

"With my research, I would like to intervene preventively and develop new therapeutic approaches for risk groups," says Rabea Hinkel. "For this, I would like to establish a model for heart failure in non-human primates in the next few years." Monkeys are particularly well suited for this because their cardiovascular system is very similar to that of humans. Together with her team of nine Hinkel plans to develop a therapy model that works and start preclinical research so that it can ultimately be used in the patient.

Not only does Hinkel plan a close interdisciplinary cooperation within the DPZ but she has also initiated collaborations with the University Medical Center Göttingen and the Max Planck Institute for Dynamics and Self-Organization. "The Göttingen site is a perfect setting for cardiological research and offers ideal conditions to promote this focus of my research," says Rabea Hinkel.

The further development and improvement of animal experimental research will be the focus of Hinkel's work at the TiHo in Hannover. "We will focus on researching replacement and supplementation methods for animal testing," she says. "Not only will we use *in vitro* experiments, but we plan on improving the methods. My goal is to reduce the burden on the animals as much as possible and increasingly replace the experiments with alternative methods." Hinkel's team will work in close collaboration with the research group "Experimental Animals" of the Institute for Animal Hygiene, Animal Welfare and Farm Animal Behavior under the direction of Bernhard Hiebl.

Rabea Hinkel studied veterinary medicine at the Justus Liebig University in Giessen. Subsequently, the Dillenburg native switched to internal medicine at the Ludwig Maximilian University (LMU) in Munich, where she earned her doctorate in 2009. As a postdoctoral researcher and veterinarian for laboratory animal research, Rabea Hinkel initially worked at the LMU in Munich before transferring to internal medicine at the Klinikum rechts der Isar of the Technical University of Munich and the Institute for Prophylaxis and Epidemiology of Cardiovascular Diseases at LMU. In 2017, she received a European Research Council Starting Grant to study the effects of diabetes on small blood vessels on the heart muscle. In Göttingen she will continue to focus on her research of heart failure in various animal models with an emphasis on clinical application.

Contact and suggestion for editors

Prof. Dr. Rabea Hinkel
Tel.: +49 (0) 551 3851-241
E-Mail: rhinkel@dpz.eu

Dr. Sylvia Siersleben (PR)
Tel.: +49 (0) 551 3851-163
E-Mail: ssiersleben@dpz.eu

Printable pictures are available in our [Media library](#). The press release is available on our [website](#). We kindly request a specimen copy in case of publication. The inaugural lecture and the presentation of the 2018 DPZ Award will take place in the main lecture hall of the German Primate Center, Kellnerweg 4, in Göttingen. Media representatives and visitors are cordially invited.

The German Primate Center (DPZ) – Leibniz Institute for Primate Research conducts biological and biomedical research on and with primates in the fields of infection research, neuroscience and primate biology. The DPZ maintains four field stations in the tropics and is the reference and service center for all aspects of primate research. The DPZ is one of 93 research and infrastructure facilities of the Leibniz Association.