

INTERVIEW

JOHN HANSEN RESEARCH GRANT 2020

INTERVIEW WITH DR. YIOULI K TENA OF THE JOHNS HOPKINS UNIVERSITY IN BALTIMORE

Tübingen, Germany, September 22, 2020 – The DKMS Stiftung Leben Spenden (Foundation for Giving Life) provides a total of almost €1 million (more than \$1 million) of funding to support international blood cancer research. DKMS spoke to one of the four young scientists who was awarded a John Hansen Research Grant worth €240,000 (\$270,000). The scholarship of the DKMS Stiftung Leben Spenden supports the research of Dr. Yiouli Ktena of the Johns Hopkins University in Baltimore, which aims to make stem cell transplantation safer for patients.

DKMS: What does the John Hansen Research Grant mean to you and what are you planning to do with it?

It is a great honor and a privilege to have been awarded the John Hansen Research Grant. While I did not have the pleasure of personally knowing Dr. Hansen, my mentor did and has told me what a wonderful individual, physician, and scientist he was. This award will allow me to advance my research, which aims to make stem cell transplantation safer for patients who need this potent and life-saving form of therapy.

DKMS: Why did you chose the topic of your project and why is stem cell transplantation so important to you?

I am a pediatric hematology and oncology specialist. For some of my patients, stem cell transplantation (where the patient's immune system is replaced by a donor's immune system) is their only chance of cure. This includes children and young adults with cancer (certain types of aggressive leukemia and lymphoma), as well as non-malignant disorders (such as bone marrow failure). Therefore, it is our obligation to try to optimize stem cell transplantation for our patients.

DKMS: Why is it necessary to promote this research area?

As mentioned, even though stem cell transplantation is the only curative therapy for many patients, successful outcomes can be limited by a complication called "graft-versus-host disease" (GVHD), where the donor's immune system starts attacking the host (patient). GVHD can attack multiple organs and it can be severe, even fatal. The current available treatments for GVHD expose our patients to increased risk of infection and cancer relapse. My research focuses on uncovering pathways, which regulate the donor cells responsible for GVHD, so we can "manipulate" these pathways to the advantage of our patients. Our goal is to limit GVHD but allow the donor immune system to develop and attack cancer when necessary (a process known as the graft-versus-tumor effect).

DKMS: About the Johns Hopkins University: What makes this university so special?

Johns Hopkins University is considered America's first research university. At Johns Hopkins Hospital, medical training as we know it today was established. In more recent years, our Oncology team revolutionized the field of stem cell transplantation around the globe, by pioneering the haploidentical („half-matched“) transplant with the use of post-transplantation cyclophosphamide (a type of chemotherapy), which has vastly expanded donor availability. It's truly inspirational to work in this environment. With cutting edge research and patient care facilities, and a wealth of academic resources, it is the ideal setting to conduct our research.

About DKMS

DKMS is an international nonprofit organization dedicated to the fight against blood cancer. Its goal is to give as many patients with blood cancer as possible a second chance at life. The organization is world leader in providing patients with life-saving stem cell transplants. DKMS has locations in Germany, the USA, Poland, UK and Chile. In addition, it is active in India - in cooperation with its partner organization DKMS BMST Foundation India – and in South Africa it works together with the Sunflower Fund, which is also a nonprofit organization. The DKMS has registered more than 10 million potential life savers. In addition, it conducts scientific research and sets standards in the typing of new stem cell donors in its laboratory, the DKMS Life Science Lab.

About the DKMS Stiftung Leben Spenden (Foundation for Giving Life)

The DKMS Stiftung Leben Spenden is the parent organization of DKMS. One of its focal points is the targeted promotion of research projects in the field of stem cell collection and transplantation. With the John Hansen Research Grant, it supports young scientists to develop new forms of therapy in the field of hematopoietic stem cell transplantation and thus improve the survival and healing chances of blood cancer patients.

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