

SAKK / Celgene “HEM Pioneer Grant” 2019

The “HEM Pioneer Grant” was awarded on 26 June 2019 during the Swiss Oncology & Hematology Congress (SOHC). This year, the research prize pays tribute to an innovative project on the topic “Use of artificial intelligence in the diagnosis of blood cancer”. The grant is supported by the SAKK (Swiss Group for Clinical Cancer Research) and by Celgene GmbH.



Prof. Dr. med. Gabriela Baerlocher (Jury President and SAKK Board Member) with Dr. med. Corinne Widmer (University Hospital Zurich)

Many types of blood cancer remain incurable and cut short the lives of patients worldwide. The “HEM Pioneer Grant” supports research projects which may make a critical difference in the fight against blood cancer. “This grant promotes ideas combining innovative spirit, courage and a touch of craziness. For many of the submitted projects, it would be difficult to obtain support from classic funding bodies”, explains Jury President and SAKK Board Member Prof. Dr. med. Gabriela Baerlocher.

Dr. med. Corinne Widmer’s project convinced the jury. She focuses on artificial intelligence in medicine: “We want to combine the oldest diagnostic method of hematology with current technology. With rapidly increasing new therapeutic approaches for hemato-oncological diseases, physicians are confronted in this field with a constantly expanding knowledge build-up and increased administrative effort. This leads to a

conflict of resources with time-consuming routine work, such as morphological blood analysis, which also requires regular training.” In addition, human anatomy is limited: “Identification of cellular structures for the human eye is only possible in routine diagnostics up to a certain size. Digital hemogram analysis by hematology analyzers indeed already exists, but the devices still require the human eye for verification.” This is where Corinne Widmer comes in with her project: “We want to further reinforce the bridge between human and automated diagnostics. The aim is to develop an algorithm that detects diseased blood cells even before we can detect them by eye.” If this succeeds, a small drop of blood will enable diagnosis of a hematological disease within a very short time. Further optimization may give an indication of the further course of the disease.

According to Gabriela Baerlocher, inclusion of artificial intelligence in the field of medicine frees up urgently-needed resources and, in the best case, even makes more objective assessments possible. Corinne Widmer confirms that her idea, in addition to efficiency, also contributes major quality improvements in diagnoses,

where results obtained in practice are frequently variable.

The existing image database will be prepared in the coming months and the “machine learning” and algorithm training will be taken in hand. For this, Zurich University Hospital may count on the support of ETH Zurich. “Use of such science interfaces is an important issue nowadays. Medicine profits from technology and vice versa”, says Gabriela Baerlocher.

The Jury welcomed numerous, high-quality submissions for the 2019 “HEM Pioneer Grant”. Next year, the research prize will be awarded again. The goal is to continue to defy blood cancer and thanks to innovative, courageous ideas, to set important milestones in research.



Contact SAKK

Tanja Brauen

SAKK Coordinating Center

T+41 31 508 41 79

tanja.brauen@sakk.ch

www.HEMpioneer.ch

The “HEM Pioneer Grant” was supported by:



About SAKK

The Swiss Group for Clinical Cancer Research [Schweizerische Arbeitsgemeinschaft für Klinische Krebsforschung] (SAKK) is a non-profit organization, which has been conducting clinical studies in Oncology since 1965. Its most important objective is to research new cancer therapies, to further develop existing treatments and to improve the chances for cancer patients of being cured. This occurs through cooperation within Switzerland and in collaboration with foreign centers and study groups. The SAKK is supported by a performance agreement with the State Secretariat for Education, Research and Innovation (SBFI) as well as by partners such as the Swiss Cancer League [Krebsliga Schweiz] and the Swiss Cancer Research Foundation [Krebsforschung Schweiz]. Further information is available at: www.sakk.ch