

KRISZTIÁN KLONFÁR



National Academy of Scientist Education, 2nd year

University of Pécs
Faculty of Medicine, 2nd year

YEAR OF BIRTH

2002

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Pécs

SZENT-GYÖRGYI MENTOR

András Garami

JUNIOR MENTOR

Eszter Pákai

SPECIALIZATION

thermophysiology,
thermoregulation,
TRP channels,
systemic inflammation

SECONDARY SCHOOL

Kökönyösi Primary School
and Elementary Art School

NAME OF TEACHER

Ágnes Vámos

LANGUAGES

English/intermediate
German/intermediate

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Our research investigates the role of brain structures involved in thermoregulation and the mediators responsible for mediating these processes in animal and human studies. Currently, there is no single medicine available that is able to specifically modulate body temperature, because it is not known exactly which receptors can be directly modulated to induce controlled changes in body temperature. With our new knowledge, we have the opportunity to develop substances that act on body temperature. The short-term benefit of our research project is a better understanding of the physiological processes involved in pathologies associated with thermoregulatory disorders (e.g. fever and hypothermia associated with systemic inflammation, acute pancreatitis, heat stroke, hypothermia, etc.). In the long term, our results from the laboratory to the bedside may lay the foundations for the development of new therapeutic targets, help to better predict disease outcome based on body temperature, identify potential physical and drug means to alter body temperature and thus improve outcome and, most importantly, save lives.

AMBITIONS AND CAREER GOALS

I would like to understand and explore the mechanisms of body temperature regulation in normal and abnormal conditions. I believe that changes in body temperature have diagnostic/prognostic significance in various disease processes. In my opinion, there are no or few physiological processes that are not related to temperature in a narrow or broad sense, so my research interests are broad, and I am open to new directions of investigation.

HONORS AND PRIZES

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PUBLICATIONS

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