PROF. DR. LAJOS KEMÉNY

CHAIRMAN, DEPARTMENT OF DERMATOLOGY AND ALLERGOLOGY, UNIVERSITY OF SZEGED GROUP LEADER, HCEMM-USZ SKIN RESEARCH GROUP HEAD OF THE MTA-SZTE DERMATOLOGICAL RESEARCH GROUP, ELKH



BACKGROUND

Lajos Kemény is an internationally recognized dermatologist, corresponding member of the Hungarian Academy of Sciences and member of the Academia Europaea. He earned his medical degree from the University of Szeged. Between 1989 and 1991, he conducted research with the Humboldt Research Fellowship in Munich, Germany. After returning to Hungary, he established his own research group to study the pathogenesis of inflammatory skin diseases. He has medical licenses for dermatology, clinical immunology and allergology. Kemény has been an active board member of all four major European dermatological societies and has served as the president of the Hungarian Dermatological Society and the Hungarian Immunological Society. His scientific results have been acknowledged by a number of prestigious awards, such as the Batthyány-Strattmann Award, Kesztyűs Loránd Award, DG-Dermopharmazie-Innovationspreis, Innovation Grand Prize, Patent Award of the Hungarian Academy of Sciences and recently the Széchenyi Prize.

WHICH ACHIEVEMENTS ARE YOU MOST PROUD OF?

I am most proud of my family: of my wife (a teacher), my son (a medical doctor) and daughter (an economist). It is very true for us, that "Behind every successful man there is a great woman." She has kept the family together even when my son worked as a post doc at Harvard University in Boston and my daughter worked at Deloitte in Sydney.

My research group made highly important discoveries in the field of skin pathophysiology. We could show that human epithelial cells express different pattern recognition receptors, and activation of these receptors are responsible for the symptoms of inflammatory skin diseases. We identified novel regulatory factors in psoriasis, a chronic and debilitating inflammatory skin disease.

"Curiosity and searching novel innovative therapies are the main drivers of my research, but I always keep in mind the goal of how we can use research findings to benefit patients."

In cooperation with the Departments of Optics and Quantum Electronics, we developed a new ultraviolet B laser for the treatment of psoriasis. We were the first to show the efficacy of this new xenon chloride excimer laser treatment in a number of skin diseases, such as in psoriasis, vitiligo and atopic dermatitis. The excimer laser is now used worldwide for the treatment of skin diseases, and the treatment is suggested in multiple treatment guidelines and textbooks. In the United States alone, more than two million patients have been treated with this technology to date. We also developed a medical device that increases the efficacy and decreases the side effects of ultraviolet therapy for psoriasis. This technology has also been patented and successfully licensed.

WHAT DREW YOU TO HEALTHCARE AS A PROFESSION?

In high school, mathematics, physics and biology were my favorite subjects, and I wanted to conduct research in natural science. As helping others is one of my main missions, there was no question for me: among the natural sciences, medicine would be the only option for me. Curiosity and searching novel innovative therapies are the main drivers of my research, but I always keep in mind the goal of how we can use research findings to benefit patients.

| e | Business Name |
|---|-------------------------------------|
| е | Top Executive |
| е | In charge of position since |
| S | Description of Business or Services |
| y | Year founded in Hungary |
|) | Total turnover in 2019 (HUF mln |
| y | HQ in Hungary |

HOW DID YOU PICK YOUR SPECIALTY AREA?

As medical student, I started my research at the Department of Dermatology, University of Szeged by focusing on the skin immune system. I think that my highly supportive, communicative and inspiring mentors (Prof. Miklós Simon in clinical dermatology and Prof. Attila Dobozy in experimental research) played very important roles for me in becoming a dermatologist.

Skin diseases account for 20% of all diagnoses in the doctor's office and, therefore, present a major public health challenge for Europe. The clinical presentations range from minor transient problems to severe, debilitating diseases and include different cancers, cutaneous, systemic infections and chronic inflammatory diseases, all of which have a high burden to patients' well-being and quality of life. The treatment of skin diseases generates profound health economic concerns, and these concerns increase as more effective, but nevertheless more expensive, and new revolutionary therapies become available.



| HCEMM Nonprofit Kft. |
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| Prof. Dr. Lajos Kemény |
| 2019 |
| Dermatologist |
| 2018 |
| NA |
| 6720 Szeged, Dugonics tér 13. |

Dermatology is a specialty in which clinical expertise and discovery research might well be combined, and the results of the basic research might be transferred relatively fast to clinical practice.

WHAT WOULD YOU CHANGE TO IMPROVE THE HEALTHCARE ENVIRONMENT IN HUNGARY?

Today, we are witnessing a number of structural changes in healthcare, including the separation of public and private healthcare, the settlement of salaries, and the creation of communities of practice. Even though these changes come with a lot of tension, I think they are changes in the right direction.

However, the COVID-19 pandemic has highlighted the need for investing in basic medical research and for fast-track development of new diagnostics and treatments. Investing in translational medicine for all fields would increase our knowledge about important diseases and would also improve patient care.