



THE HUNGARIAN ACADEMY OF SCIENCES KINDLY INVITES YOU TO ATTEND THE EVENT OF THE HUNGARIAN SCIENCE FESTIVAL WITH THE TITLE

BÉKÉSY SYMPOSIUM: MECHANISMS OF HEARING ALONG THE FOOTSTEPS OF GEORG VON BÉKÉSY

Date and time of venue:

30th of November 2022. [Wednesday] 3:00 PM

Address:

HAS Main Building Conference room

9. Széchenyi István square, 1051 Budapest

PROGRAM

15.00-15.05: **INTRODUCTION**

György Panyi, Miklós Kellermayer and Peter Dallos

15.05–15.15: THE HERITAGE OF GEORG VON BÉKÉSY

Mariann Békésy

15.15-15.45: PRESTIN CONFORMATIONAL DYNAMICS AND THE MOLECULAR BASIS OF THE COCHLEAR

AMPLIFIER

Eduardo Perozo, Ph.D. (Professor, Biochemistry & Molecular Biology, Institute for Biophysical

Dynamics; Pritzker Fellow, The University of Chicago)

15.45–16.15: MOLECULAR COMPOSITION OF THE MECHANOTRANSDUCTION CHANNEL COMPLEX OF

COCHLEAR HAIR CELLS (online)

Ulrich Mueller, Ph.D., (Bloomberg Professor of Neuroscience, Johns Hopkins University)

16.15-16.45: MECHANICAL GATING OF THE TMC1 TRANSDUCTION CHANNEL IN HAIR CELLS (online)

David Corey, Ph.D. (Bertarelli Professor of Translational Medical Science, Harvard Medical

School)

Science: The Key to Learning about the World





CRITICAL BEHAVIOR IN THE ACTIVE PROCESS OF COCHLEAR HAIR CELLS (online) 16.45-17.15: James Hudspeth, MD., Ph.D. (E.M. Kirby Professor of Neuroscience, Rockefeller University) Break SENSITIVITY AND TUNING IN HAIR CELLS OF THE INNER EAR (online) 17.30-18.00: Dolores Bozovic, Ph.D., (UCLA Center for Biological Physics) SEEKING DRUG THERAPY FOR SENSORINEURAL HEARING LOSSES 18.00-18.30: Tibor Zelles, M.D., Ph.D. (associate professor, Dept. Oral Biology and Dept. Pharmacology & Pharmacotherapy, Semmelweis University, Budapest; Laboratory of Molecular Pharmacology, Institute of Experimental Medicine, Budapest) THE FIRST ARTIFICIAL SENSORY ORGAN - COCHLEAR IMPLANT 18.30-19.00: József Géza Kiss, Ph.D. (professor of audiology, University of Szeged, Albert Szent-Gyorgyi Medical Center, Department of Otolaryngology and Head & Neck Surgery) **CONCLUSIONS AND CLOSING** 19.00-19.15: György Panyi and Miklós Kellermayer