

Dr. Dong-Hyung Cho



Affiliation: Kyungpook National University / Orgasis Ltd

Title: Selective autophagy for cellular organelles: Basic research and application.

Summary: Autophagy, a vital cellular mechanism, plays a key role in maintaining cellular health through the degradation and recycling of cellular components. This self-eating process is essential for removing damaged proteins and organelles, thus protecting cells from potential harm. Its impact extends to enhancing health and prolonging lifespan by preserving cellular integrity. In recent advancements, autophagy has been effectively utilized in drug development, cosmeceutical products, and functional foods. In the pharmaceutical sector, it is targeted to improve treatments for diseases such as cancer and Alzheimer's, while in cosmeceuticals, it is used to promote skin health and combat aging. Additionally, functional foods are designed to activate autophagy, offering health benefits and aiding in disease prevention. I will briefly introduce these applications and discuss the future potential of autophagy in creating value, emphasizing its broad therapeutic potential and its importance in promoting longevity and overall wellness.

Biography : Dr. Dong-Hyung Cho is a professor at Kyungpook National University (KNU) specializing in the fields of autophagy and cellular organelles, with a particular focus on aging and aging associated diseases. He currently serves as the CTO at ORGASIS since 2022 and is the Director of the Cellular Organelle Research Institute at KNU. Throughout his career, Dr. Cho has published 164 peer-reviewed papers

Dr. Cho completed his Ph.D. in Life Sciences at Gwangju Institute of Science and Technology (GIST). He started his career at Kyungpook National University in 2018, where he has been a professor in the Department of Biotechnology. Prior to this, he was an Associate and Assistant Professor at Kyung Hee University and Seoul Asan Medical Center. He also held a postdoctoral position at the Sanford Burham Prebys Institute for Medical Research in the San Deigo (USA).