

2024 LECTURE SERIES

PRESENTED BY THE ACADEMY OF DISTINGUISHED RESEARCHERS
IN COLLABORATION WITH THE SIGMA XI UTSA CHAPTER

Ronald A. DePinho, MD

Harry Graves Burkhart III Distinguished University Chair

Professor, Department of Cancer Biology

Past President, UT MD Anderson Cancer Center

TUESDAY, OCTOBER 22, 2024

4:00 PM

UTSA Main Campus | John Peace Library
4th Floor | Assembly Room, 4.04.22

RSVP AT: tinyurl.com/ADROCT22



“Understanding and Treating Aging”

Summary:

Advancing age is the most important risk factor for the development of age-related diseases such as cancer, cardiovascular disease and Alzheimer’s Disease. Telomerase Reverse Transcriptase (TERT) plays an essential role in telomere maintenance and in the regulation of transcription factors governing gene expression networks integral to aging and age-related diseases. The onset of aging is associated with epigenetic repression of TERT, resulting in alterations in TERT-regulated transcriptome. Telomerase activator compound (TAC) de-represses the TERT promoter, restores physiological TERT levels, and ameliorates hallmarks of aging. TAC treatment of aged mice eliminated senescent cells, quelled inflammaging, spurred neurogenesis with improved cognition, and enhanced neuromuscular function with increased strength, balance and coordination. The impact of TAC treatment on age-related diseases will also be discussed.

Bio

Ronald A. DePinho, M.D. is the past president and distinguished university professor at MD Anderson Cancer Center in Houston, Texas. He studied biology at Fordham University, received his M.D. degree with distinction from the Albert Einstein College of Medicine, and performed his residency and postdoctoral training at Columbia-Presbyterian Medical Center. His research career began at Einstein as the Feinberg Senior Faculty Scholar in Cancer Research and an ACS Research Professor. He then joined the Dana-Farber Cancer Institute and Harvard Medical School where he was the founding Director of the Belfer Institute for Applied Cancer Science. He is a member of the National Academy of Medicine and the National Academy of Science, and a fellow of the American Academy of Arts and Sciences, the American Association of the Advancement of Science, and the American Association of Cancer Research.