

## DEPARTMENT OF

## BIOCHEMISTRY AND MOLECULAR BIOLOGY

Ferguson College of Agriculture

Friday August 27, 2021

Roger E. Koeppe Endowed Lecture

Reception

3:00 p.m. Noble Research Center 3<sup>rd</sup> floor Atrium

Lecture 4:00 p.m.

Koeppe Seminar Room 348B NRC

## Arlan Richardson, Ph.D.

Director, Oklahoma Nathan Shock Aging Center Donald W Reynolds Endowed Chair of Aging Research Professor of Biochemistry & Molecular Biology University of Oklahoma Health Science Center and Research Career Scientist Oklahoma City VA Medical Center



## What is the Role of Oxidative Stress, Cell Senescence, and Inflammation in Aging?

Dr. Arlan Richardson earned his Ph.D. in chemistry/biochemistry from Oklahoma State University in 1968. He has devoted his 50-year career to aging research at Illinois State University, the University of Texas Health Science Center at San Antonio (where he Directed the Barshop Institute on Longevity and Aging Studies), and the University of Oklahoma Health Sciences Center where he is Professor of Biochemistry & Molecular Biology and the Donald W. Reynolds Endowed Chair of Aging Research and Senior VA Career Scientist at the Oklahoma City VA Medical Center. Dr. Richardson has mentored and directed the research of more than 75 Ph.D. graduate students, postdoctoral fellows, and junior faculty and is the author of more than 300 peer-reviewed scientific publications. In 1993, he received the Nathan Shock Award from the Gerontology Research Center at the National Institute on Aging for his pioneering research on the effect of dietary restriction on gene expression. In 1995, he received the Robert W. Kleemeier Award for outstanding research in the field of gerontology from the Gerontological Society of America, and in 2001 the Harman Research Award for research contributions in the field of aging and dietary restriction from the American Aging Association. He received the Irving Wright Award of Distinction in Aging Research from the American Federation for Aging Research (2008) and the Lord Cohen Medal for Services to Gerontology from the British Society for Research on Ageing. In 2021, he received the Exceptional Mentor Award from the American Aging Association. His leadership roles include serving as president of both the Gerontological Society of America and the American Aging Association. In addition, Dr. Richardson served on the Board of Scientific Counselors at the National Institute on Aging from 2002 to 2007 and the National Advisory Council on Aging from 2010 to 2013. In 1991, he was Chair of the Gordon Conference on the Biology of Aging, San Miniato, Italy, and in 2008 the Chair/Organizer of the Keystone Symposium on Metabolic Pathways of Longevity.Dr. Richardson's research has focused on various aspects of aging: (i) the effects of aging and dietary restriction on gene expression in rats and mice, (ii) testing the oxidative stress theory of aging by measuring the effect of alterations in the antioxidant defense system on the lifespan and pathology of transgenic and knockout mice, and (iii) studying the effect of rapamycin on aging and age-related diseases. He is currently studying the mechanism responsible for genotype differences in response to dietary restriction and the role of chronic inflammation in aging.