

Sean Morrison, Ph.D., elected to the National Academy of Medicine

October 15, 2018

To the UT Southwestern Community:

Please join me in congratulating Sean Morrison, Ph.D., Professor and Director of the Children's Medical Center Research Institute at UT Southwestern (CRI) and a Howard Hughes Medical Institute Investigator, on his election to the National Academy of Medicine, a component of the prestigious National Academies of Sciences.

Dr. Morrison is internationally recognized in the field of stem cell replication. His discoveries have broad implications for our understanding of cancer and aging, and for translating this understanding into future therapies. Over decades of research, Dr. Morrison has identified a series of genes and molecular mechanisms that allow stem cells to replicate themselves in tissues – a process called self-renewal – necessary to regenerate tissues after injury.

Prior to his work, the location of the stem cells, along with the identity of the supporting cells that sustain them, were unknown. Dr. Morrison's lab discovered that blood-forming stem cells reside adjacent to blood vessels, where they depend on growth factors produced by endothelial cells and Leptin Receptor+ cells. The Leptin Receptor+ cells are a major source of the growth factors that regulate stem cell maintenance, blood cell production, and the regeneration of the blood-forming system after chemotherapy or radiation therapy.

Dr. Morrison, also a Cancer Prevention and Research Institute of Texas (CPRIT) Scholar in Cancer Research, holds the Kathryne and Gene Bishop Distinguished Chair in Pediatric Research at Children's Research Institute at UT Southwestern and the Mary McDermott Cook Chair in Pediatric Genetics. He joined UT Southwestern in 2011 as Director of CRI and served as President of the International Society for Stem Cell Research.

His election brings to 17 the number of NAM members at our institution.

Daniel K. Podolsky, M.D. President, UT Southwestern Medical Center