



Professor Leif Andersson Uppsala University

Leif Andersson was born in 1954 in Stockholm, to parents with a farming background and a connection to nature and the environment. This set Leif on a life-long path characterised by an avid interest in both nature and the animals that reside within it. He attended the University of Stockholm, before taking his first position at the Swedish University of Agriculture Sciences (SLU) in Uppsala. While his first interests concerned the genetics of wild populations, his work at SLU quickly focussed on domestic or farm-yard species. One of his greatest contributions to the animal sciences has been the use of domestic animal populations as a model system to understand the impact of evolutionary processes on DNA sequence, and to unravel the relationship between gene function and phenotypic variation.

During the 1990s Leif was a driving force in the pig research community, using linkage mapping within purpose built pedigrees to map a spectrum of traits including meat quality, carcass composition and coat color phenotypes. Prior to the development of next generation sequencing, Leif lead research that was amongst the first to successfully convert QTL studies through to the successful discovery of functional variants with a direct consequence on phenotype. This included the genetic dissection of both monogenic and multigenic complex traits in horse, dogs, cattle and chickens.

A complimentary theme of his research has been to examine aspects of the domestication process, which



has had profound impact on both animals and the human societies who have reared them. His work has examined the demographic aspects of domestication, as well as it's consequences on genome wide patterns of variability. The last few years has seen Leif return to the analysis of wild populations. Using the technology and approaches honed during the analysis of domestic animals, his work is tackling an even more daunting challenge: identification of the genes responsible for adaptation in the wild. His current research involves Atlantic herring, where he and his colleagues have successfully identified the genetic basis for adaptation to life history traits.

During his distinguished career, Leif has been honoured with the Wolf Prize in Agriculture and is a member of the Royal Swedish Academy of Science and a foreign associate of the National Academy of Science (USA). Leif has mentored countless students and is a valued friend and colleague to many.

