

Dr. Christer Malm, Umeå University, Sweden

Preliminary title: The long road to clean sports



Christer Malm holds a B.Sc. in exercise physiology from the University of Connecticut and a Ph.D. in physiology and pharmacology from the Karolinska Institutet. He is an Associate professor at the Umeå University and head of a research group of about 15 people, focused on muscle biology and muscle adaptation to exercise. Physical performance testing of fire fighters and cross country skiers and development of a novel test to detect blood doping are on-going projects. The main research focus is to understand the molecular mechanisms governing skeletal muscle adaptation and development in response to changes in physical demand. This is relevant in order to use exercise to improve function both in health and disease.

A long standing collaboration with Swedish government agencies has developed physical profiles and tests for fire-fighters and military personnel, the former now implemented nationwide. Attention has also been paid to method development, where novel approaches combine exercise physiology with multivariate statistics. This approach has successfully been applied when developing physical profiles for fire-fighters and alpine skiers, as well as doping detection. Current government standard for testing firefighters in Sweden is one product of this research, as well as a novel test to detect blood doping.

Since 2014, he is the CEO of ProTest Diagnostics AB and PTD Holding AB, which develops tests for doping detection as well as LC-MS/MS analytical services.