

Bad Science: The Floyd Landis Case

Bob Blackledge
Consulting Forensic Chemist

ABSTRACT

Floyd Landis, a professional bicycle racer from Murrieta, California, won the 2006 Tour de France. However, not many days after the race's conclusion, the Laboratoire National de Dépistage du Dopage (LNDD) "announced" (actually the information was leaked to the press) that a urine sample obtained from Floyd after stage 17 had been found to be positive for a form of synthetic testosterone. If this finding were to be upheld, Landis would be stripped of his title and also banned from participation in the sport. Landis denied any sports doping and his strategy in fighting these charges has been to try to generate public support and to make all of the documentation of the LNDD tests available to the public. GC/MS is used by LNDD for preliminary sample screening, and carbon stable isotope ratio mass spectrometry is used for final confirmation. From the standpoint of a forensic analytical chemist with experience in forensic laboratory accreditation standards, this presentation will examine the analytical data and correspondence from the Landis case in terms of: chain of custody requirements; World Anti-Doping Association (WADA) guidelines and LNDD SOP; and reasonable standards of good laboratory practice.