COLOMBIAN RESULTS OF THE INTERLABORATORY QUALITY CONTROL EXERCISE 2013-2014

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Currently, all agencies of conformity assessment testing laboratory favor the participation in proficiency testing as a mechanism for quality assurance. In Colombia, the Genes Laboratory has been designated, since 2008, to perform the design and implementation of proficiency testing for all the interested laboratories. In this report, the results of Colombian exercises Inter-laboratory Quality Control for the years 2013 and 2014 are presented. In both years the exercise consisted in one practical component, one theoretical mandatory component and a theoretical optional component. The participants were 23 and 20 laboratories in 2013 and 2014, respectively, representing seven different countries of Latin America and the Caribbean. For the practical component each participant laboratory receive; (1) samples of blood, saliva and/or semen stains, in this part they should report the routine own laboratory markers for each sample, (2) three optional theoretical cases of varying complexity, (3) a simple theoretical approach consistent of paternity case (father, mother and son) (2013) and a complex paternity case with a deceased father (2014). In the last two components of the exercise they had to submit only the calculations. In both years, for the practical component the consensus of 70 STR markers, distributed between autosomal and linked to the sex chromosomes, was achieved with an error rate of 1.75% and 3.07% for 2013 and 2014, respectively. On the other hand, for mandatory theoretical exercise, error rates of 21.74% (2013) and 10.63% (2014) were detected. This inter-laboratory exercise has become an important mechanism for quality assurance in the region.