

ARGENTINIAN POPULATION DATA FOR 8 STR LOCI USING SILVER-STAINING BASED TECHNOLOGIES

J.A. Lorente M.D., Ph.D. ³, **D.A. Gangitano M.S.** ¹, **G.J. Juvenal Ph.D.** ², **B. Budowle Ph.D.** ⁴,
and R.A. Padula M.S. ¹

¹*DNA Section, Chemical Laboratory Division, Federal Police, Argentina*

²*Radiobiology Unit, CNEA – CONICET, Argentina*

³*Lab. Of Genetic Identification, Legal Medicine Dept., University of Granada, Spain*

⁴*Laboratory Division, FBI Academy, VA*



Population studies on eight short tandem repeat loci, CSF1PO, TPOX, TH01, D16S539, D7S820, D13S317 (GITAD loci), FESFPS and vWA were carried out in a sample of unrelated Argentine individuals (n = 113 - 140) living in Buenos Aires (central region of Argentina). All loci meet Hardy-Weinberg expectations. There is little evidence for association of alleles among the eight loci. Only two of twenty-eight pairwise comparisons demonstrated departures from independence. Statistical parameters of legal medicine interest were calculated as well.

The eight loci showed a combined probability of exclusion of 0.9980 and a combined discrimination power greater than 0.99999999, the systems D13S317, D16S539 and vWA being the most informative.

Power of Discrimination (PD) and Probability of Exclusion (PE) for eight STR loci

Locus	PD (Observed)	PD (Expected)	PE
FESFPS	0.83482054	0.83315725	0.41349837
vWA	0.92254679	0.92996093	0.60362936
CSF1PO	0.87744898	0.87220960	0.47263748
TPOX	0.82653061	0.82279857	0.40241843
TH01	0.91489796	0.91824794	0.57180104
D16S539	0.92233271	0.92443462	0.58775421
D7S820	0.91660193	0.91605741	0.56687047
D13S317	0.93821540	0.94571180	0.64998341
Total	0.99999999	0.99999999	0.99803942