

FES/FPS

Population	Ref.	n	7	8	9	10/10 ^a	11/11 ^a	12/12 ^a	13	14	15
Europe											
Europe (Basques, Catalans, Northern Italians, Northern Europeans)	(81)	436	0.0000	0.0110	0.0040	0.2680	0.4030	0.2450	0.0640	0.0020	0.0000
Basques (pooled)		627	0.0000	0.0048	0.0008	0.3684	0.3190	0.2321	0.0686	0.0064	0.0000
Basques (autochthonous)	(45, 62)	208	0.0000	0.0000	0.0024	0.3486	0.3029	0.2620	0.0745	0.0096	0.0000
Basques (autochthonous)	(98)	319	0.0000	0.0047	0.0000	0.3840	0.3166	0.2163	0.0721	0.0063	0.0000
Germany (pooled)		7683	0.0006	0.0162	0.0059	0.2792	0.4423	0.2113	0.0432	0.0013	0.0003
Germany	(50)	194	0.0000	0.0103	0.0077	0.2835	0.4252	0.2320	0.0387	0.0026	0.0000
Germany (North-West)	(16, 80)	414	0.0000	0.0120	0.0060	0.3040	0.4430	0.1880	0.0450	0.0020	0.0000
Germany (South-West)	(61)	516	0.0010	0.0160	0.0020	0.3010	0.4320	0.1990	0.0470	0.0030	0.0000
Germany (South-West)	(66)	284	0.0000	0.0106	0.0035	0.2657	0.4599	0.2150	0.0458	0.0000	0.0000
Germany (Hamburg)	(56)	1190	0.0000	0.0202	0.0013	0.2718	0.4706	0.1966	0.0374	0.0008	0.0013
Germany (Thuringia)	(52)	410	0.0000	0.0183	0.0183	0.2756	0.4378	0.2037	0.0463	0.0000	0.0000
Germany (Aachen)	(54)	302	0.0000	0.0066	0.0033	0.2550	0.4570	0.2285	0.0480	0.0017	0.0000
Germany (Bochum, Essen, Recklinghausen)	(76)	480	0.0000	0.0135	0.0031	0.2844	0.4375	0.2198	0.0417	0.0000	0.0000
Germany (Bonn)	(49)	241	0.0000	0.0120	0.0120	0.2880	0.4090	0.2510	0.0230	0.0040	0.0000
Germany (Rostock)	(55)	103	0.0000	0.0097	0.1214	0.2039	0.4175	0.2136	0.0340	0.0000	0.0000
Hungary (pooled)		708	0.0008	0.0142	0.0008	0.2522	0.4539	0.2258	0.0496	0.0027	0.0000
Hungary (South)	(53)	111	0.0050	0.0090	0.0050	0.2700	0.4680	0.2110	0.0320	0.0000	0.0000
Hungary (Baranya County, Romany population)	(79)	135	0.0000	0.0070	0.0000	0.1820	0.4370	0.3740	0.0000	0.0000	0.0000
Italy (pooled)		4827	0.0003	0.0079	0.0072	0.2649	0.3912	0.2576	0.0654	0.0061	0.0000
Italy	(65)	2376	0.0003	0.0082	0.0095	0.2535	0.3972	0.2570	0.0691	0.0052	0.0000
Italy (North, Central, South)	(86)	591	0.0000	0.0118	0.0068	0.2876	0.3689	0.2589	0.0601	0.0059	0.0000
Italy (North, Brescia area)	(67)	102	0.0000	0.0049	0.0196	0.2402	0.3922	0.2598	0.0833	0.0000	0.0000
Italy (Sicily)	(75)	150	0.0000	0.0030	0.0060	0.2530	0.4360	0.2260	0.0660	0.0060	0.0000
Italy (Tuscany)	(68)	234	0.0000	0.0000	0.0000	0.2760	0.3960	0.2560	0.0660	0.0060	0.0000
Poland (pooled)		643	0.0031	0.0216	0.0069	0.2991	0.4378	0.1752	0.0530	0.0029	0.0000
Poland (North-East, Bialystok)	(58)	203	0.0000	0.0120	0.0070	0.3030	0.4410	0.1870	0.0470	0.0020	0.0000
Poland (South)	(70)	124	0.0000	0.0280	0.0080	0.3250	0.4110	0.1830	0.0450	0.0000	0.0000
Poland (Pomerania-Kujawy region)	(60)	210	0.0096	0.0286	0.0048	0.2976	0.4595	0.1357	0.0571	0.0071	0.0000
Portugal (pooled) (Azores and Madeira Archipelago not included)		2091	0.0004	0.0129	0.0026	0.3287	0.3664	0.2412	0.0424	0.0047	0.0000
Portugal (Central)	(28, 63)	811	0.0010	0.0190	0.0020	0.3120	0.3820	0.2410	0.0400	0.0020	0.0000
Portugal (North)	(29, 99)	409	0.0000	0.0100	0.0020	0.3040	0.3690	0.2650	0.0450	0.0040	0.0000
Portugal (North)	(51, 78)	173	0.0000	0.0087	0.0029	0.3410	0.3670	0.2341	0.0405	0.0058	0.0000
Portugal (North, autochthonous)	(100)	279	0.0000	0.0070	0.0040	0.3820	0.3310	0.2240	0.0430	0.0090	0.0000
Portugal (North, living there)	(100)	295	0.0000	0.0070	0.0030	0.3710	0.3410	0.2270	0.0420	0.0090	0.0000
Portugal (Azores Archipelago)	(83)	141	0.0000	0.0106	0.0106	0.3156	0.3759	0.2234	0.0603	0.0036	0.0000
Portugal (Madeira Archipelago) (pooled)		212	0.0000	0.0094	0.0000	0.2664	0.4340	0.2476	0.0378	0.0048	0.0000
Portugal (Madeira Archipelago)	(71)	140	0.0000	0.0071	0.0000	0.2893	0.4036	0.2679	0.0321	0.0000	0.0000
Portugal (Madeira Archipelago)	(99)	72	0.0000	0.0140	0.0000	0.2220	0.4930	0.2080	0.0490	0.0140	0.0000
Slovenia	(72)	235	0.0000	0.0170	0.0020	0.3170	0.4130	0.1940	0.0550	0.0020	0.0000

Spain (pooled)		2325	0.0008	0.0104	0.0033	0.3043	0.3907	0.2355	0.0523	0.0026	0.0002
Spain	(96)	256	0.0019	0.0078	0.0078	0.2754	0.4043	0.2422	0.0566	0.0019	0.0019
Spain (Central)	(97)	391	0.0000	0.0077	0.0013	0.3159	0.3683	0.2455	0.0563	0.0051	0.0000
Spain (East, Valencia)	(90)	295	0.0017	0.0085	0.0051	0.3390	0.3441	0.2492	0.0508	0.0017	0.0000
Spain (North, Asturias)	(82)	150	0.0030	0.0170	0.0000	0.2800	0.4130	0.2270	0.0570	0.0030	0.0000
Spain (North-East)	(59)	145	0.0000	0.0172	0.0035	0.2586	0.4586	0.2138	0.0448	0.0035	0.0000
Spain (South-West)	(64)	201	0.0000	0.0050	0.0025	0.3184	0.3682	0.2487	0.0572	0.0000	0.0000
Spain (North of Aragon)	(77)	150	0.0030	0.0170	0.0000	0.2800	0.4130	0.2270	0.0570	0.0030	0.0000
Spain (South of Aragon)	(77)	100	0.0000	0.0100	0.0050	0.3000	0.3750	0.2700	0.0350	0.0050	0.0000
Spain (Andalucia, Canary Islands, Extremadura)	(102)	176	0.0000	0.0227	0.0114	0.3352	0.3295	0.2415	0.0568	0.0028	0.0000
Turkey (pooled) (Kurds included)		514	0.0059	0.0048	0.0020	0.2470	0.4207	0.2695	0.0457	0.0036	0.0000
Turkey (pooled) (without Kurds)		414	0.0025	0.0060	0.0025	0.2185	0.4221	0.2959	0.0471	0.0045	0.0000
Turkey (Laz-Turks)	(43)	211	0.0020	0.0050	0.0000	0.1920	0.4540	0.2930	0.0500	0.0020	0.0000
Turkey (South, Adana area)	(16, 43, 80)	203	0.0030	0.0070	0.0050	0.2460	0.3890	0.2990	0.0440	0.0070	0.0000
Turkey (Kurds)	(43)	100	0.0200	0.0000	0.0000	0.3650	0.4150	0.1600	0.0400	0.0000	0.0000
America											
America (Mayas, Surui, Karitania)	(81)	60	0.0000	0.0160	0.0000	0.0160	0.5160	0.2830	0.1660	0.0000	0.0000
America, North											
Canada (Québec, French Canadian Caucasoids)	(47)	321	0.0030	0.0110	0.0030	0.2490	0.4080	0.2660	0.0580	0.0020	0.0000
USA (Afroamericans) (pooled)		679	0.0066	0.1030	0.0450	0.2281	0.3661	0.2092	0.0411	0.0006	0.0000
USA (Afroamericans)	(42)	248	0.0081	0.1169	0.0363	0.2218	0.3831	0.2077	0.0262	0.0000	0.0000
USA (Afroamericans, Chicago)	(71)	50	0.0000	0.1200	0.0200	0.1600	0.3600	0.2600	0.0800	0.0000	0.0000
USA (Caucasoids) (pooled)		597	0.0000	0.0168	0.0042	0.3137	0.4162	0.2003	0.0459	0.0022	0.0000
USA (Caucasoids)	(42)	203	0.0000	0.0222	0.0049	0.3498	0.4138	0.1601	0.0493	0.0000	0.0000
America (South)											
Argentina (Amerindians) (pooled)		243	0.0000	0.0083	0.0020	0.1442	0.4622	0.2782	0.0774	0.0205	0.0040
Argentina (Amerindians, Mapuche, Rio Negro Province)	(57)	44	0.0000	0.0000	0.0110	0.1590	0.5000	0.2800	0.0450	0.0000	0.0000
Argentina (Amerindians, Mapuche)	(87)	50	0.0000	0.0200	0.0000	0.1700	0.5200	0.2600	0.0300	0.0000	0.0000
Argentina (Amerindians, Mocovi)	(87)	36	0.0000	0.0280	0.0000	0.1800	0.5000	0.1530	0.1390	0.0000	0.0000
Argentina (Amerindians, Tehuelche, Chubut Province)	(57)	28	0.0000	0.0000	0.0000	0.1400	0.7100	0.1000	0.0350	0.0000	0.0000
Argentina (Amerindians, Wichi)	(87)	50	0.0000	0.0000	0.0000	0.0000	0.1500	0.6500	0.1100	0.0900	0.0000
Argentina (Amerindians, Wichi, Salta Province)	(57)	35	0.0000	0.0000	0.0000	0.2610	0.5410	0.0420	0.1100	0.0140	0.0280
Argentina (Caucasoids) (pooled)		463	0.0022	0.0116	0.0026	0.2393	0.4340	0.2379	0.0558	0.0103	0.0102
Argentina (Caucasoids, Buenos Aires)	(57)	363	0.0000	0.0120	0.0020	0.2460	0.4200	0.2470	0.0560	0.0090	0.0130
Argentina (Caucasoids, Urban, La Plata city)	(87)	100	0.0100	0.0100	0.0050	0.2150	0.4850	0.2050	0.0550	0.0150	0.0000
Brazil (Rio de Janeiro)	(95)	216	0.0070	0.0300	0.0280	0.2520	0.4030	0.2220	0.0560	0.0020	0.0000
Chile (mixed ancestry)	(94)	71	0.0141	0.0352	0.0070	0.2465	0.3803	0.2606	0.0423	0.0140	0.0000

Colombia (pooled)	(101)	637	0.0000	0.0174	0.0039	0.2082	0.4707	0.2098	0.0860	0.0039	0.0000
Colombia (Barranquilla)	(101)	67	0.0000	0.0379	0.0000	0.2273	0.4394	0.2197	0.0682	0.0076	0.0000
Colombia (Bogotá)	(101)	308	0.0000	0.0049	0.0016	0.1922	0.5065	0.2052	0.0896	0.0000	0.0000
Colombia (Cali)	(101)	86	0.0000	0.0233	0.0058	0.2151	0.4360	0.2384	0.0814	0.0000	0.0000
Colombia (Medellín)	(101)	128	0.0000	0.0391	0.0117	0.2344	0.4414	0.1875	0.0703	0.0156	0.0000
Colombia (Villavicencio)	(101)	48	0.0000	0.0000	0.0000	0.2021	0.4255	0.2340	0.1383	0.0000	0.0000
Colombia (African-Colombians)	(103)	247	0.0020	0.1073	0.0648	0.1721	0.4312	0.1721	0.0364	0.0142	0.0000
Colombia (Caucasian-Mestizo)	(88)	450	0.0044	0.0089	0.0022	0.2000	0.5200	0.1811	0.0767	0.0067	0.0000
Asia, South-West											
Saudi Arabia	(74)	132	0.0000	0.0080	0.0190	0.3180	0.3330	0.2230	0.0830	0.0150	0.0000
Asia, Far East											
Asia (Chinese, Japanese, Cambodian)	(81)	66	0.0000	0.0000	0.0150	0.1060	0.6810	0.1660	0.0300	0.0000	0.0000
China (pooled)		435	0.0000	0.0011	0.0045	0.0413	0.4414	0.3149	0.1840	0.0125	0.0000
China (Northeast, Shenyang)	(73)	91	0.0000	0.0000	0.0110	0.0380	0.5000	0.2250	0.2200	0.0050	0.0000
Chinese (Han population, Chen Yong area)	(80)	94	0.0000	0.0000	0.0050	0.0320	0.5000	0.2660	0.1810	0.0160	0.0000
China (Xiangxi, Tujia)	(85)	50	0.0000	0.0000	0.0000	0.0600	0.3400	0.3700	0.2200	0.0100	0.0000
(China (Xiangxi, Miao)	(85)	50	0.0000	0.0000	0.0000	0.0500	0.4400	0.3800	0.1200	0.0100	0.0000
China (Xiangxi, Bai)	(85)	50	0.0000	0.0100	0.0100	0.0700	0.4600	0.3600	0.0900	0.0000	0.0000
China (Shenyang, Chaoxian)	(85)	50	0.0000	0.0000	0.0000	0.0400	0.3000	0.3400	0.3000	0.0200	0.0000
China (Shenyang, Han)	(85)	50	0.0000	0.0000	0.0000	0.0100	0.4500	0.3800	0.1300	0.0300	0.0000
Japan (pooled)		397	0.0000	0.0014	0.0066	0.0916	0.3486	0.3347	0.1982	0.0195	0.0000
Japan (Northeast, Sendai)	(73)	111	0.0000	0.0000	0.0050	0.0860	0.3420	0.3600	0.1940	0.0140	0.0000
Japan (Shiga area)	(80)	136	0.0000	0.0040	0.0000	0.0440	0.3710	0.3460	0.2210	0.0150	0.0000
Korea (South)	(93)	499	0.0000	0.0010	0.0010	0.0390	0.4740	0.2980	0.1740	0.0120	0.0010
Philippines (Metro Manila)	(46, 84)	103	0.0050	0.0000	0.0000	0.0290	0.4320	0.3060	0.2180	0.0100	0.0000
Taiwan	(44)	100	0.0000	0.0000	0.0050	0.0600	0.5450	0.2050	0.1700	0.0150	0.0000
Africa											
Africa (Mbuti and Biaka, Lisongo)	(81)	60	0.0000	0.1000	0.1000	0.2660	0.3490	0.1500	0.0330	0.0000	0.0000
Cameroon (Bamileke)	(89)	46	0.0220	0.1740	0.0110	0.1960	0.3590	0.1520	0.0760	0.0110	0.0000
Cameroon (Ewondo)	(89)	65	0.0080	0.0770	0.0380	0.1920	0.4540	0.2080	0.0230	0.0000	0.0000
Central African Republic (Sanga)	(89)	35	0.0000	0.1000	0.0000	0.3290	0.4140	0.1430	0.0140	0.0000	0.0000
Central African Republic (Mbenzele Pygmies)	(89)	49	0.0310	0.1220	0.0820	0.1530	0.3160	0.2040	0.0710	0.0200	0.0000
Morocco (Moroccans living in Brussels)	(80)	138	0.0000	0.0070	0.0040	0.3400	0.3080	0.2930	0.0430	0.0040	0.0000
Morocco (Arabs) (pooled)		199	0.0000	0.0211	0.0101	0.3709	0.3228	0.2358	0.0379	0.0019	0.0000
Morocco (Arabic speaking group)	(69)	123	0.0000	0.0180	0.0120	0.3480	0.3350	0.2350	0.0490	0.0030	0.0000
Morocco (Arabs)	(91)	76	0.0000	0.0260	0.0070	0.4080	0.3030	0.2370	0.0200	0.0000	0.0000
Morocco (Berbers) (pooled)		116	0.0000	0.0133	0.0000	0.2900	0.3385	0.2660	0.0839	0.0087	0.0000
Morocco (Berber speaking group)	(69)	41	0.0000	0.0130	0.0000	0.3200	0.3850	0.1670	0.1150	0.0000	0.0000
Morocco (North and Central, Berbers)	(91)	27	0.0000	0.0000	0.0000	0.2410	0.3700	0.3150	0.0740	0.0000	0.0000
Morocco (South, Berbers)	(91)	48	0.0000	0.0210	0.0000	0.2920	0.2810	0.3230	0.0630	0.0210	0.0000
Namibia (Ovambos)	(80)	97	0.0100	0.1240	0.0310	0.1600	0.4900	0.1600	0.0260	0.0000	0.0000
Sahara (West, Saharawis)	(91)	59	0.0000	0.0420	0.0080	0.3140	0.3310	0.2630	0.0340	0.0080	0.0000

São Tomé e Príncipe (pooled)		671	0.0380	0.1041	0.0439	0.2259	0.3675	0.1856	0.0292	0.0058	0.0000
São Tomé e Príncipe	(92)	321	0.0390	0.1070	0.0450	0.2260	0.3600	0.1870	0.0300	0.0060	0.0000
São Tomé e Príncipe	(78)	350	0.0371	0.1014	0.0429	0.2258	0.3743	0.1843	0.0285	0.0057	0.0000
Uganda (Bantu group)	(80)	60	0.0080	0.1330	0.0330	0.2500	0.4000	0.1500	0.0260	0.0000	0.0000
Oceania: Australia, Polynesia, Melanesia											
Pacific (Australian Aborigines, Papua-New Guineans, Nasisoi Melanesians)	(81)	62	0.0000	0.0000	0.0000	0.0480	0.6120	0.2410	0.0960	0.0000	0.0000
Australia (Aborigines, Adelaide area)	(80)	68	0.0000	0.0000	0.0220	0.0810	0.7210	0.1540	0.0220	0.0000	0.0000
Papua New Guinea (Eastern Highlands)	(80)	95	0.0000	0.0000	0.0000	0.0370	0.5530	0.1680	0.2110	0.0320	0.0000

References

- (42) **Smith, T.A., West Virginia State Police** (1997) personal communication
- (43) **Iwasa, M., Wiegand, P., Rand, S., Schürenkamp, M., Atasoy, S., Brinkmann B.** (1997) Genetic variation at five STR loci in subpopulations living in Turkey. *Int. J. Legal. Med.* 110: 170-172
- (44) **Lee, J. C.-I., Chen, C.H., Tsai, L.-C., Linacre, A., Chang, J.G.** (1997) The screening of 13 short tandem repeat loci in the Chinese population. *Forens. Sci. Int.* 87: 137-144
- (45) **Garcia, O., Martin, P., Budowle, B., Uriarte, J., Albarran, C., Alonso, A.** (1998) Basque Country autochthonous population data on 7 short tandem repeat loci. *Int. J. Legal Med.* 111: 162-164
- (46) **Halos, S.C., Fortuno III, E.S., Ferreón, A.C.M., Chu, J.Y., Miranda, J., Harada, S., Benecke, M.** (1998) Allele frequency distributions of the polymorphic STR loci HUMVWA, HUMFES, HUMF13A01 and the VNTR D1S80 in a Filipino population from Metro Manila. *Int. J. Legal Med.* 111: 224-226
- (47) **Busque, L., Desmarais, D., Provost, S., Schumm, J.W., Zhong, Y., Chakraborty, R.** (1997) Analysis of allele distribution for six short tandem repeat loci in the French Canadian population of Québec. *J. Forens. Sci.* 42: 1147-1153
- (48) **Ambach, E., Parson, W., Niederstätter, H., Budowle, B.** (1997) Austrian Caucasian population data for the quadruplex plus amelogenin: Refined mutation rate for HumvWFA31/A. *J. Forens. Sci.* 42: 1136-1139
- (49) **Madea, B., Junge, A.** (1998) Institut für Rechtsmedizin, Bonn, personal communication
- (50) **Weisser, H.-J., Lutz, S.** (1998) Institut für Rechtsmedizin, Freiburg, personal communication
- (51) **Pereira, L., Gusmão, L., Amorim, A., Prata, M.J., Silva, F., Bessa, I., Santos, M.T.** (1996) Population and segregation data on the STRs CD4, FES/FPS, MBP (Locus B), TH01, TP53, TPO and vWA31/A in North Portugal. *Proc. 7th Int. Symp. Human Identification.* Promega Corp., 193
- (52) **Meyer, E., Hädrich, C., Hendrich, F.-I.** (1998) Institut für Rechtsmedizin, Jena, personal communication
- (53) **Szabo, A., Schürenkamp, M., Hühne, J.** (1998) Hungarian population data for six STR loci. *Int. J. Legal Med.* 111: 49-51
- (54) **Cremer, U., Scheil, H.-G., Schiwy-Bochat, K.-H., Schürfeld, K., Althoff, H.** (1998): Populationsgenetische Studie der PCR-VNTR-Systeme TH01, FES, F13B und CD4. Poster presentation at the 77. Jahrestagung Dtsch. Ges. Rechtsmed. Hannover, 15.-19.09.1998
- (55) **Bulnheim, U., Hammer, U., Wegener, R., Meissner, D., Karstädt, G.** (1998) Institut für Rechtsmedizin, Rostock, personal communication
- (56) **Martin, W., Muche, M.** (1998) Institut für Blutgruppenserologie und Genetik, Hamburg, personal communication
- (57) **Sala, A., Penacino, G., Corach, D.** (1998) Comparison of allele frequencies of eight STR loci from Argentinian Amerindian and European populations. *Hum. Biol.* 70: 937-947
- (58) **Janica, J., Pepinski, W., Skawronska, M., Berent, J.A.** (1997) The STR systems FES/FPS and F13B in a Polish population. *Int. J. Legal Med.* 110: 329-330
- (59) **Crespillo, M., Luque, J.A., Fernández, R., Ramírez, E., García, P., Valverde, J.L.** (1997) Allele frequency distributions of 13 PCR-based systems in a population from North-East Spain. *Int. Leg. Med.* 110: 223-225
- (60) **Miscicka-Sliwka, Czarny, J., Grzybowski, T., Wozniak, M.** (1998) Population genetics of 14 STRs: vWA, TH01, TPOX, CSF1PO, D5S818, D13S317, D7S820, D16S539, F13A01, FESFPS, F13B, LPL, D3S1358 and FGA in the Pomerania-Kujawy region of Poland. *Progr. Forensic Genet.* 7: 261-263
- (61) **Förster, R., Bäßler, G., Pflug, W., Schnee-Griese, J., Uhl, S.** (1998) Allele frequencies (HUMVWA, HUMTH01 and HUMFES/FPS) in a population sample of South-West Germany. *Progr. Forensic Genet.* 7: 278-281
- (62) **García, O., Martin, P., Uriarte, J., Albarrán, C., Alonso, A.** (1998) Allele frequency distribution of 7 STR loci in the Basque country autochthonous population. *Progr. Forensic Genet.* 7: 282-284
- (63) **Souto, L., Amorim, A., Vide, M.C.** (1998) Population and segregation data on the multiplex system (TH01, VWA, FES, F13A1) from Central Portugal. *Progr. Forensic Genet.* 7: 363-365
- (64) **Gamero, J.J., Souto, L., Vieira, D.N., Vizcaya, M.A., Arufe, M.I., Feliú, M.M., Vide, M.C., Romero, J.L.** (1998) Population study of the HUMVWA, HUMTH01, HUMFES and HUMF13A1 STR polymorphisms in the South-West of Spain. *Progr. Forensic Genet.* 7: 366-368
- (65) **De Stefano, F., Presciuttini, S.** (1998) An Italian collaborative study on HUMFES/FPS locus (GEFI project Ancona 2) - allele and phenotype frequencies. *Progr. Forensic Genet.* 7: 369-371
- (66) **Degenhartt, S., Leim, K., Clerici, S., Reichert, W., Mattern, R.** (1998) Studies on 7 autosomal and 5 Y-chromosomal STR loci in a South-West German population. *Progr. Forensic Genet.* 7: 527-530
- (67) **Cerri, N., Decarli, A., Zorzi, F., De Ferrari, F.** (1998) A statistical analysis by means linear model on Italian STRs population data. *Progr. Forensic Genet.* 7: 559-561
- (68) **Domenici, R., Fornaciari, S., Nardone, M., Rocchi, A., Spinetti, I., Venturi, M., Presciuttini, S.** (2000) Allele frequencies of the HUMTH01, HUMVWA31/A, HUMFES/FPS, HUMF13A1 loci in Tuscany (Italy). *Progr. Forensic Genet.* 8: 164-166
- (69) **Brandt-Casadevall, C., Taroni, F., Dimo-Simonin, N., Baala, L., Sefiani, A., Mangin, P.** (2000) Moroccan population alleles frequency on 9 PCR-based loci. *Progr. Forensic Genet.* 8: 221-223
- (70) **Turowska, B., Sanak, M.** (2000) Frequency data on the loci vWA, FES/FPS, F13A01, TH01, TPOX and CSF1PO in a population from South Poland. *Int. J. Legal Med.* 113: 123-125
- (71) **Corte-Real, F., Souto, L., Anjos, M.J., Carvalho, M., Vieira, D.N., Carracedo, A., Vide, M.C.** (1999) Population distribution of six PCR-amplified loci in Madeira Archipelago (Portugal). *Forensic Sci. Int.* 100: 93-99
- (72) **Zupanec, I., Balazic, J., Komel, R.** (1998) Analysis of nine short tandem repeat (STR) loci in the Slovenian population. *Int. J. Legal Med.* 111: 248-250
- (73) **Nata, M., Kimura, T., Hashiyada, M., He, P., Yan, W., Li, X., Funayama, M., Sagisaka, K.** (1999) Allele frequencies of eight STRs in Japanese and Chinese. *Int. J. Legal Med.* 112: 396-399

- (74) **Sinha, S., Amjad, M., Rogers, C., Hamby, J.E., Tahir, U.A., Balamurugan, K., Al-Kubaidan, N.A., Choudhry, A.R., Budowle, B., Tahir, M.A.** (1999) Typing of eight short tandem repeat (STR) loci in a Saudi Arabian population. *Forensic Sci. Int.* 104: 143-146
- (75) **Asmundo, A., Crinò, C.** (1998) Population study of the short tandem repeat polymorphisms HumTH01, HumvWA31, HumFESFPS and GhumF13A1 in Sicily (Southern Italy). *Int. J. Legal Med.* 111: 281-283
- (76) **Stein, C.** (1998) Institut für Rechtsmedizin, Essen, personal communication
- (77) **Martinez Jarreta, B., Diaz Roche, P., Abecia, E.** (1999) Genetic variation at six STR loci (HUMTH01, HUMTPOX, HUMCSF1PO, HUMF13A01, HUMFES/FPS, HUMVWA31) in Aragon (North Spain). *Forensic Sci. Int.* 100: 87-92
- (78) **Pereira, L., Gusmão, L., Prata, M.J., Mota, P., Trovoada, M.J., Amorim, A.** (1999) Detection of additional structural variation at the FES/FPS system and population data from S. Tomé e Príncipe and North Portugal. *Int. J. Legal Med.* 112: 204-206
- (79) **Füredi, S., Kozma, Z., Woller, J., Pádár, Z., Angyal, M., Bajnóczky, I., Nishi, K.** (1998) Population genetic data on four STR loci in a Hungarian Romany population. *Int. J. Legal Med.* 112: 72-74
- (80) **Brinkmann, B., Junge, A., Meyer, E., Wiegand, P.** (1998) Population genetic diversity in relation to microsatellite heterogeneity. *Hum. Mutation* 11: 135-144
- (81) **Pérez-Lezaun, A., Calafell, F., Mateu, E., Comas, D., Bosch, E., Bertranpetit, J.** (1997) Allele frequencies for 20 microsatellites in a worldwide population survey. *Hum. Hered.* 47: 189-196
- (82) **Bell, B., Nievas, P., Abecia, E., Martínez-Jarreta, B., Hinojal, R., Martínez-Cordero, A.** (2000) Population genetics of the STR loci HUMCSF1PO, HUMF13A01, HUMFES/FPS and D12S391 in Asturias (northern Spain). *Forensic Sci. Int.* 113: 21-23
- (83) **Corte-Real, F., Souto, L., Anjos, M.J., Carvalho, M., Vieira, D.N., Carracedo, A., Vide, M.C.** (1999) Population study of HUMTH01, HUMVWA31/A, HUMF13A1 and HUMFES/FPS systems in Azores. *J. Forensic Sci.* 44: 1261-1264
- (84) **Halos, S.C., Chu, J.Y., Ferreon, A.C.M., Magno, M.M.F.** (1999) Philippine population database at nine microsatellite loci for forensic and paternity applications. *Forensic Sci. Int.* 101: 27-32
- (85) **Lin, Z., Ohshima, T., Gao, S., Kondo, T., Takayasu, T., Sato, Y., Sun, K.** (2000) Genetic variation and relationships at five STR loci in five distinct ethnic groups in China. *Forensic Sci. Int.* 112:179-189
- (86) **Maviglia, R., Dobosz, M., Boschi, I., Caglià, A., Hall, D., Capelli, C., d'Aloja, E., Pescarmona, M., Moschetti, A., Pascali, V.L., Destro-Bisol, G.** (2000) A repository of 14 PCR-loci Italian gene frequencies in the world wide web. *Forensic Sci. Int.* 115: 99-101
- (87) **Tourret, N., López Gamelo, J., Vidal-Rioja, L.** (1999) Allele frequencies of six STR loci in Argentine populations. *J. Forensic Sci.* 44: 1265-1269
- (88) **Yunis, J.J., Garcia, O., Uriarte, I., Yunis, E.J.** (2000) Population data on 6 short tandem repeat loci in a sample of Caucasian-Mestizos from Colombia. *Int. J. Legal Med.* 113: 175-178
- (89) **Destro-Bisol, G., Boschi, I., Caglià, A., Tofanelli, S., Pascali, V., Paoli, G., Spedini, G.** (2000) Microsatellite Variation in Central Africa: An analysis of intrapopulation and interpopulation genetic diversity. *Am. J. Phys. Anthropol.* 112: 319-337
- (90) **Aler, M., Salas, A., Gisbert, M., Carracedo, A.** (2001) Data for nine autosomal STRs markers from Valencia (east mediterranean coast of the Iberian Peninsula). *Forensic Sci. Int.* 116: 37-39
- (91) **Bosch, E., Clarimón, J., Pérez-Lezaun, A., Calafell, F.** (2001) STR data for 21 loci in northwestern Africa. *Forensic Sci. Int.* 116: 41-51
- (92) **Gusmão, L., Prata, M.J., Miranda, C., de Jesus Trovoada, M., Amorim, A.** (2001) STR data from S. Tomé e Príncipe (Gulf of Guinea, West Africa). *Forensic Sci. Int.* 116: 53-54
- (93) **Han, M.S., Kang, P.W., Choi, D.H., Lee, Y.H., Choi, S.K., Kim, W.** (2001) Genetic variation at eight STR loci in the Korean population. *Forensic Sci. Int.* 116: 35-36
- (94) **Figueroa, C.C., Acuña, M.S., Cifuentes, L.** (2000) Gene frequencies for six STR loci in a Chilean population of mixed ancestry. *J. Forensic Sci.* 45: 742-743
- (95) **Barros de Castro, I.A., Rinzler, C.M.C., Rumjanek, F.D.** (2000) Allele frequency distributions for twelve STR loci in a Brazilian population. *J. Forensic Sci.* 45: 941
- (96) **Comisaria General de Policía Científica**, Spain. Cited from Database of Nuclear DNA / gep-isfh
- (97) **Instituto Nacional de Toxicología**, Departamento de Madrid, Spain. Cited from Database of Nuclear DNA / gep-isfh
- (98) **Iriondo, M., Barbero, M.C., Izagirre, N., Manzano, C.** (1997) Data on six short-tandem repeat polymorphisms in an autochthonous Basque population. *Hum. Hered.* 47: 131-137
- (99) **Pinheiro, F., Pontes, L., Gene, M., Huguet, E., Pinta da Costa, J., Moreno, P.** (1997) Population study of the HUMTH01, HUMVWA31A, HUMF13A1 and HUMFES/FPS polymorphisms in the North of Portugal. *J. Forensic Sci.* 42: 121-124
- (100) **Universidade de Oporto**, PATIMUT, Portugal. Cited from Database of Nuclear DNA / gep-isfh
- (101) **Jimenez, M., Galindo, A., Paredes, M., Bustos, J., Lizarazo, R., Calderon, G.** (1999) Caracterización genética de los loci STR HUMvWAA31, HUMF13A1, HUMFES/FPS en cinco ciudades colombianas y su aplicación forense. *Jornadas de Genética Forense. Reunión del GEP-ISFH*, Bilbao, 181-183. Cited from Database of Nuclear DNA / gep-isfh
- (102) **Instituto Nacional de Toxicología**, Departamento de Sevilla, Spain. Cited from Database of Nuclear DNA / gep-isfh
- (103) **Instituto de Genética**, Universidad Nacional de Colombia. Cited from Database of Nuclear DNA / gep-isfh