UNIVERSITY OF SZEGED

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The Osteological Evidence of Neolithic Populations from the Southern Great Plain of Hungary

An Insight into the Potential of Macroscopic Observations for the Demographic and Pathological Analyses of Past Populations

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Ph.D. Thesis

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Appendix 1: Comparative table of measurements used for sexing adults							
Bone	**Measurements**	**Female**	**Female?**	**Sex?**	**Male?**	**Male**	**References**
Skull							
Skull	Max. Length	<179	*~178.6*	179-185	*~185.6*	>185	Keen 1950 based on 50♂+ 50♀ black South Africans
		~170.6				*~180.1*	Hanihara 1959 based on Japanese
		<159	*~174*		*~182.6*	>193	Simmons 1942 based on 1179♂+ 182♀ white adults ≥20 years old from the Reserve Collection. Also quoted in Stewart 1954 and Krogman & Iscan 1986
		<174	*~171.5*	174-178	*~181.3*	>178	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		<182	*~179*	182-185	*~187.7*	>185	Steyn & Iscan 1998 based on 44♂+ 47♀ white South Africans, from Pretoria and Dart Collections
		~174.54				*~181.23*	Demoulin 1972 based on 75♂+ 56♀ French adults
	Max. breadth	*~133*				*~135.4*	Keen 1950 based on 50♂+ 50♀ black South Africans
		~136.8				*~139.8*	Hanihara 1959 based on 64♂+ 41♀ Japanese
			~139.22		*~144.58*	>154	Simmons 1942 based on 1179♂+ 182♀ white adults ≥20 years old from the Reserve Collection. Also quoted in Stewart 1954 and Krogman & Iscan 1986
		<137	*~138.7*	137-144	*~143*	>144	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		~140.38				*~145.53*	Demoulin 1972 based on 75♂+ 56♀ French adults
	Basion-bregma height	<126	*~127.1*	126-132	*~131.4*	>132	Keen 1950 based on 50♂+ 50♀ black South Africans
			~130.9		*~138.2*		Hanihara 1959 based on 64♂+ 41♀ Japanese
		<129	*~127.5*	129-132	*~134.3*	>132	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		<133	*~130.5*	133-136	*~136.8*	>136	Steyn & Iscan 1998 based on 44♂+ 47♀ white South Africans, from Pretoria and Dart Collections
			~126.4		*~132.2*		Demoulin 1972 based on 75♂+ 56♀ French adults
	Porion-bregma height		*~109.2*		*~115*		Demoulin 1972 based on 75♂+ 56♀ French adults
	Bizygomatic breadth	<123	*~119.5*	123-125	*~128.2*	>125	Keen 1950 based on 50♂+ 50♀ black South Africans
		~125.5				*~132*	Hanihara 1959 based on 64♂+ 41♀ Japanese
		<127	*~122.7*	127-128	*~131.9*	>128	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		<124.5	*~121.9*	125.5	*~128.9*	>125.5	Steyn & Iscan 1998 based on 44♂+ 47♀ white South Africans, from Pretoria & Dart Collections [80.2% accuracy using sectioning point]
		~123.5				*~132.4*	Demoulin 1972 based on 75♂+ 56♀ French adults

Skull *(ctd.)*	Min. frontal breadth	<94	*~93.6*	94-98	*~97.8*	>98	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
	Mastoid process length	<25	*~26.5*	25-29	*~29.3*	>29	Keen 1950 based on 50♂+ 50♀ black South Africans
		<25	*~25.2*	25-28	*~28.1*	>28	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		~24.9				*~28.3*	Demoulin 1972 based on 75♂+56 ♀ French adults
	Porion-asterion length	*~44.3*				*~48.2*	Demoulin 1972 based on 75♂+ 56♀ French adults
	Zygomatic arch breadth	*~3.19*				*~4.04*	Demoulin 1972 based on 75♂+ 56♀ French adults
	Upper facial height	<66	*~66.3*	66-70	*~70.8*	>70.5	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
			~65.8		*~72.5*		Demoulin 1972 based on 75♂+ 56♀ French adults
		<67	*~66*	67-71	*~71.3*	>71	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
			~65.5		*~69.3*		Hanihara 1959 based on 64♂+ 41♀ Japanese
	Total face height	<109	*~108.7*	109-117	*~116.8*	>117	Keen 1950 based on 50♂+ 50♀ black South Africans
	Nasal breadth	<22	*~23.1*	22-25	*~24.3*	>25	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
		<22.5	*~22.9*	23-25	*~24.8*	>25	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
	Nasal height	<50	*~49.8*	50-52	*~53.7*	>52	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
	Nasion to bregma	<123	*~126*	123-133	*~129.3*	>133	Keen 1950 based on 50♂+ 50♀ black South Africans
	Bregma to lambda	<120	*~121.7*	120-131	*~126.5*	>131	Keen 1950 based on 50♂+ 50♀ black South Africans
	External palatal Breadth	<56	*~57*	56-61	*~60*	>61	Giles & Elliot 1963 based on 75♂+ 75♀ white adults from Terry and Todd Collections
Mandible	Mandibular length	<105	*~107.8*	105-113	*~111.2*	>113	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
	Mandibular (ramus) height	<63.6	*~60.7*	64-65	*~68.5*	>65.1	Giles 1964 from 31♂+ 30♀ white adults, Terry Collection
	Mandibular ramus minimum breadth	<27.5	*~28.5*	28-31	*~31.1*	>31	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
		<26.5	*~28.6*	26.5-31.5	*~29.9*	>31.7	Giles 1964 from 31♂+ 30♀ white adults, Terry Collection
			~31.1		*~33.3*		Hanihara 1959 based on 60♂+ 40♀ Japanese
	Condyloid height		*~54.1*		*~60.9*		Hanihara 1959 based on 60♂+ 40♀ Japanese
	Bicondylar breadth	<111.3	*~112.2*	111.5-118.5	*~116.1*	>118.8	Giles 1964 from 31♂+ 30♀ white adults, Terry Collection
		<112	*~111.2*	112-117	*~117*	>117	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections

Mandible *(ctd.)*	Bigonial breadth		*~88.9*		*~96.4*		Hanihara 1959 based on 60♂+ 40♀ Japanese
		<93.6	*~93*	94-98	*~99.4*	>98.2	Giles 1964 from 31♂+ 30♀ white adults, Terry Collection
		<94	*~91.5*	94-96	*~99.6*	>96.5	Steyn & Iscan 1998 from 44♂ +47♀ white South Africans, in Pretoria & Dart Collections
	Symphyseal height	<28.5	*~28.5*	28.5-31.5	*~32.4*	>31.5	Giles 1964 from 31♂+ 30♀ white adults, Terry Collection
			~30.6		*~34.2*		Hanihara 1959 based on 60♂+ 40♀ Japanese
	Angle of mandible	>133°	*~128 °*	122-133°	*~125.3°*	<122°	Keen 1950 based on 50♂+ 50♀ black South Africans
		>125°					Acsádi & Nemeskéri 1970
Thorax							
Sternum	Sternum length (Manubrium+body)	<138	138-142	143-157	158-162	>162	Stewart & McCormick 1983 from x-rays of 617 autopsied Americans, >**90%** accuracy (100% accuracy for ♀<121mm + ♂>173mm)
		<121				>173	Stewart & McCormick 1983 from x-rays of 617 autopsied Americans, **100%** accuracy
		<131		131-140		>140	Jit et al. 1980 from 312♂+ 88♀ sterna from India, **100%** accuracy, direct bone measurements
		<149				>149	Ashley 1956, Europeans only. Quoted in Acsádi & Nemeskéri 1970
Pelvis and Spine							
Pelvis	Greater sciatic notch angle	>68°				<68°	France in Reichs 1998
	Sciatic notch width	>57	*~46.7*	29-57	*~42.8*	<29	Kelley 1979 based on 100♂+ 100♀ white Americans from Hamann-Todd Collection
		>54	*~44*	35-54	*~39*	<35	Kelley 1979 based on 100♂+ 100♀ Native Americans from California
		>50	*~41.9*	40.3	*~38.5*	<32	MacLaughlin & Bruce 1986 based on 71♂+ 60♀ from St Bride's Church, London
		>58.5	*~45.6*	43.9	*~42*	<36.5	MacLaughlin & Bruce 1986 based on 74♂+ 66♀ from Leiden Collection.
		>38	*~35*	21-38	*~25.1*	<21	Washburn 1949 based on 82♂+ 70♀ Bantu documented skeletons.
	Innominate length	<169.8	*~182.1*		*~197.2*	>214.6	Singh & Raju 1977 based on Indian cadavers. Quoted in Krogman & Iscan 1986
	Iliac crest rise	52.2-59.8				64.8-69.2	Camacho et al. 1993 based on 27♂+ 15♀ Spanish modern dry bones, 95% CI
	Iliac width	83.1-92.3		92.4-94.6		94.7-100.8	Camacho et al. 1993 based on 27♂+ 15♀ Spanish modern dry bones
		<153	*~157.3*	153-165	*~162.4*	>165	Straus 1927 based on 100♂+ 50♀ white Americans
	Iliac crest index	35.5-40.2				43.2-45.8	Camacho et al. 1993 based on 27♂+ 15♀ Spanish modern dry bones, 95% CI

Pelvis *(ctd.)*	Pubis length	>83	*~77.9*		*~73.8*	<69	Washburn 1948 based on 100♂+ 100♀ white adults from Hamann-Todd Collection
			~73.5		*~69.2*		Washburn 1948 based on 50♂+ 50♀ black adults from Hamann-Todd Collection
		>79	*~78.2*		*~74.1*	<74	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection
		>85	*~80.1*		*~74.1*	<73	Hanna & Washburn 1953 based on 129♂+ 95♀ Eskimos
		≥100	*~97*		*~93.2*	≤91	Howells 1965 from75♂+ 69♀ in Gaillard's Collection.
		>85.7	*~79.6*		*~72.1*	>61.9	Singh & Raju 1977 based on Indian cadavers. Quoted in Krogman & Iscan 1986.
		>83	*~78*		*~74*	<69	Acsádi & Nemeskéri 1970
	Pubic angle		*~110°*		*~70°*		Acsádi & Nemeskéri 1970
	Ischium length	<85.5	*~81.8*		*~90.6*	>86	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection.
		<75	*~78.3*		*~88.4*	>93	Washburn 1948 based on 100♂+ 100♀ white adults from Hamann-Todd Collection
		<79	*~77.5*		*~86.6*	>86	Washburn 1948 based on 50♂+ 50♀ black adults from Hamann-Todd Collection
		<79	*~81*		*~88.4*	>89	Hanna & Washburn 1953 based on 129♂+ 95♀ Eskimos
		<91	*~89.3*		*~96.9*	>94	Howells 1965 from 75♂+ 69♀ in Gaillard's Collection
		~81.8	<85	85-86	>86	*~90.5*	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection
		<69.1	*~76*		*~83*	>89.1	Singh & Raju 1977 based on Indian cadavers. Quoted in Krogman and Iscan 1986
		<75	*~78*		*~88*	>93	Acsádi & Nemeskéri 1970
	Ischium - Pubis Index	>95	*~99.5*		*~83.6*	<91	Washburn 1948, white ancestry only, 91% accuracy
		>98.2	*~104.6*		*~87.1*	<82.9	Singh & Raju 1977 based on Indian cadavers. Quoted in Krogman and Iscan 1986
		>94	*~100*		*~84*	<91	Acsádi & Nemeskéri 1970
	Acetabular diameter [vertical]	<46		46-55		>55	Xinzhi et al. 1982 from115♂+ 54♀ Han (Chinese) modern skeletons (unknown sex) 87.1% accuracy
		<49	~48.4	49-57	~56.3	>57	Kelley 1979 from 100♂+ 100♀ white Americans in Hamann-Todd Collection
		<46	~46	46-52	~51	>52	Kelley 1979 from 100♂+ 100♀ Native Americans, California
		<48	*~48.6*	51.3	*~54*	>54.5	MacLaughlin & Bruce 1986 based on 71♂+ 60♀ from St Bride's Church, London
		<51.5	*~51.5*	54.3	*~57*	>62	MacLaughlin & Bruce 1986 based on 74♂+ 66♀ from Leiden Collection
		<42.9	*~43.6*	43-49	*~51.8*	>49.3	Raju & Singh 1979 based on Indian cadavers. Quoted in Krogman and Iscan 1986
	Acetabular diameter [transverse]	<43.4	*~42.9*	43-48	*~51*	>48.3	Raju & Singh 1979 based on Indian cadavers. Quoted in Krogman and Iscan 1986

Pelvis *(ctd.)*	Sciatic notch / acetabular index	>62.5	*~71.4*	79.1	*~86.8*	<52	MacLaughlin & Bruce 1986 based on 71♂+ 60♀ from St Bride's Church, London
		>93	*~89.5*	81.5	*~76.6*	<68	MacLaughlin & Bruce 1986 based on 74♂+ 66♀ from Leiden Collection
			≥ 88		≤ 86		Kelley 1979 from 100♂+100♀ white & 100♂+100♀ black Americans in Hamann-Todd Collection & 100♂+100♀ Native Americans, California
Spine	Atlas transversal diameter	<74	*~72*		*~83*	>76	Acsádi & Nemeskéri 1970
Sacrum	Base width	<44.5	*~43.6*		*~48.9*	>47.5	Kimura 1982 from50♂+ 50♀ white adults in Terry Collection
		≤44	*~43.6*		*~48.8*	≥50	Kimura 1982 from 49♂+ 48♀ black adults in Terry Collection
		<45.5	*~45.1*		*~50.0*	≥49	Kimura 1982 based on 52♂+ 51♀ Japanese from Yokohama City Medical School
	Wing width	≥42	*~40*		*~37*	<36	Kimura 1982 from 50♂+ 50♀ white adults in Terry Collection
		≥37	*~37.5*		*~32.3*	<33	Kimura 1982 from 49♂+ 48♀ black adults in Terry Collection
		≥37	*~35.7*		*~32.7*	≤33	Kimura 1982 based on 52♂+ 51♀ Japanese from Yokohama City Medical School
	Base-wing index	>87	*~92.2*		*~76.2*	≤82	Kimura 1982 from 50♂+ 50♀ white adults in Terry Collection
		>82	*~86.4*		*~66.7*	<75	Kimura 1982 from 49♂+ 48♀ black adults in Terry Collection
		≥76	*~79.7*		*~65.8*	>67.5	Kimura 1982 based on 52♂+ 51♀ Japanese from Yokohama City Medical School
Shoulders							
Scapula	Scapula length	<129	129-139	140-159	160	>160	Dwight 1894. Quoted in Bass 1995
		<137	*~141.9*		*~160.4*	>168	Krogman 1962 from 1200♂+ 457♀ white adults. Quoted in Bass 1995
			~135.5		*~167.6*		Krogman 1962 from 146♂+ 102♀ white Europeans.
			<140		≥170		Stewart 1979 quoted in Byers 2008
		<130.4	*~136.6*		*~158.3*	>158.2	Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 99.9% accuracy
			<143.8		>149		Bainbridge & Genoves 1956. Quoted in Korgman & Iscan 1986. 84.2% accuracy.
			~144		*~157*		Olivier 1960. Quoted in Acsádi & Nemeskéri 1970
		<144				>157	Iordanidis 1961. Quoted in Korgman& Iscan 1986

Scapula *(ctd.)*	Scapula breadth	<86	*~93.9*		*~104.9*	>113	Krogman 1962 from1200♂+ 457♀ white adults. Quoted in Bass 1995
			~90.5		*~106.5*		Krogman 1962 from 146♂+ 102♀ white Europeans.
		<93				>106	Iordanidis 1961. Quoted in Korgman & Iscan 1986
		<90.7	*~92.7*		*~105.4*	>104.8	Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 99.9% accuracy.
			<96.7		>100.5		Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 84.2% accuracy.
	Spine length	<119.7	*~124*		*~142.3*	>141.3	Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 99.9% accuracy.
			<128.3				Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 84.2% accuracy.
		<128				>141	Iordanidis 1961. Quoted in Korgman & Iscan 1986
			~128		*~141*		Olivier 1960, quoted in Acsádi & Nemeskéri 1970
	Axillary border length	<110.1	*~116.6*		*~134.2*	>135.5	Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 99.9% accuracy.
			<126.2		>128.3 demar		Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 84.2% accuracy.
	Glenoid cavity length		*~30.8*		*~35.6*		Hanihara 1959 based on 76♂+ 56♀ Japanese
			<36	36	>36		Stewart 1979, also quoted in Byers 2008
		<34	~33.6	34-36	~39.2	>37	Dwight 1894, 1904-05 based on 63♂+ 27♀, fresh bones with cartilage intact
	Glenoid cavity width	<26				>29	Iordanidis 1961. Quoted in Korgman & Iscan 1986:227
		<23.3	*~24.3*		*~29.6*	>29.3	Bainbridge & Genoves 1956 based on 31♂+ 41♀ from St Bride's Church, London and 46♂+ 13♀ from Cambridge, 99.9% accuracy.
			~23.9		*~28.1*		Hanihara 1959 based on 76♂+ 56♀ Japanese
			~26		*~29*		Olivier 1960, quoted in Acsádi & Nemeskéri 1970

Clavicle	Clavicle length	<148	*~140.3*	148	*~158.5*	>148	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection.
		<119.8	*~129.8*		*~147.6*	>156.1	Jit & Singh 1966 from116♂+ 61♀ Indian cadavers. Quoted in Krogman & Iscan 1986
			~138		*~150*		Olivier 's numerous studies in the 1950s, quoted in Acsádi & Nemeskéri 1970
	Circumference	<26.2	*~29.5*		*~35.7*	>35.4	Jit & Singh 1966 from116♂+ 61♀ Indian cadavers. Quoted in Krogman & Iscan 1986
			~32		*~36*		Olivier 's numerous studies in the 1950s, quoted in Acsádi & Nemeskéri 1970
Upper Limbs							
Humerus	Vertical head diameter		<43		>48		Ubelaker 1984
		<43	43-44	44-46	46-47	>47	Stewart 1979 from dry bones of 50♂+ 50♀ in Terry Collection. Quoted in Bass 1995 and Byers 2008.
		~42.7	<45		>46	*~48.8*	Dwight 1905 from 200♂+ 200♀ white fresh bones with cartilage intact in Harvard Medical School. 95.25% accuracy
		<51	*~43.2*	46.04	*~49*	>43	Steyn & Iscan 1999 from 55♂+ 48♀ white South Africans in Dart & Pretoria Collections
		<44.3				>44.3	Dittrick & Suchey 1986 from 157♂+ 61♀ prehistoric skeletons, Central California
		<40.8	*~42.2*	45.4	*~48.4*	>46.9	France 1983 & 1998 from 84♂+ 76♀ white Americans in Terry Collection, 89.4% accuracy
	Transverse head diameter	<38.8	*~39.1*	42.2	*~45*	>44.1	France 1983 & 1998 from 84♂+ 76♀ white Americans in Terry Collection, 89.4% accuracy
		~37	<41		>42	*~44.7*	Dwight 1905 based on 200♂+ 200♀ white fresh bones with cartilage intact from Harvard Medical School. 95% accuracy
		<41.2	*~38.6*		*~43.5*	>41.2	Dittrick & Suchey 1986 from 150♂+ 155♀ prehistoric skeletons, Central California
	Max. length	*~299.8*				*~324.6*	Dwight 1905 based on 200♂+ 200♀ white fresh bones with cartilage intact from Harvard Medical School
		<320	*~305.9*	320-325	*~339*	>325	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection
			~269.7		*~295.9*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<299	*~309.4*		*~335*	>346	Steyn & Iscan 1999 from 55♂+ 48♀ white South Africans in Dart & Pretoria Collections
			<313.9		>313.9		Dittrick & Suchey 1986 from 150♂+ 153♀ prehistoric skeletons, Central California
		<253.1	*~279.7*		*~311.3*	>325.6	Singh & Singh 1972 from 216♂ +74♀ Indian cadavers. Quoted in Krogman & Iscan 1986
			~280		*~330*		Acsádi & Nemeskéri 1970

Humerus *(ctd.)*	Midshaft minimum diameter	<16	*~16.4*		*~19.2*	>20	Steyn & Iscan 1999 from 55♂+ 48♀ white South Africans in Dart & Pretoria Collections.
			<16.4		>16.4		Dittrick & Suchey 1986 from 149♂ +152♀ prehistoric skeletons, Central California
	Midshaft maximum diameter	<20	*~20.7*		*~23.3*	>24	Steyn & Iscan 1999 from 55♂+ 48♀ white South Africans in Dart & Pretoria Collections
			<22		>22		Dittrick & Suchey 1986 from 149♂ +152♀ prehistoric skeletons, Central California
	Midshaft circumference	<44.1	*~49.1*		*~58.5*	>60.5	Singh & Singh 1972 from 216♂ +74♀ Indian cadavers. Quoted in Krogman & Iscan 1986
	Epicondylar width		<59.3		>59.3		Dittrick & Suchey 1986 from 167♂ +165♀ prehistoric skeletons, Central California
		<49.3	*~52.4*		*~60.4*	>64.7	Singh & Singh 1972 from 216♂ +74♀ Indian cadavers. Quoted in Krogman & Iscan 1986
			~50.6		*~58.6*		Hanihara 1958 from 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<55	*~55.9*	60.06	*~64.3*	>63	Steyn & Iscan 1999 from 55♂+ 48♀ white South Africans in Dart & Pretoria Collections
		<60	*~56.8*	60	*~63.8*	>60	Thieme 1957 from 98♂+ 100♀ black Americans in Terry Collection
		<55.7	*~55.8*	59.6	*~63.8*	>62.7	France 1983 & 1998 from 84♂+ 82♀ white Americans in Terry Collection, 85.5% accuracy
Radius	Max. length	<207.7	*~212*		*~243.3*	>255.7	Singh G. et al. 1974 from 92♂+ 39♀ Indian cavaders. Quoted in Krogman & Iscan 1986
			~197.8		*~222.4*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
			~200		*~235*		Olivier 1960, quoted in Acsádi & Nemeskéri, 1970
	Midshaft circumference		*~37.5*		*~43.2*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<30.1	*~33.3*		*~39.3*	>41.9	Singh G. et al. 1974 from 92♂+ 39♀ Indian cadavers. Quoted in Krogman & Iscan 1986
	Head circumference		*~59.5*		*~69.8*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<54.8	*~59.5*		*~67.8*	>69	Singh G. et al. 1974 from 92♂+ 39♀ Indian cadavers. Quoted in Krogman & Iscan 1986
	Head max.diameter	≤21				≥24	Berrizbeitia 1989 from 152 white♂ +103 white♀ +172 black♂ +140 black♀ in Terry Collection
	Head min.diameter	≤20				≥23	Berrizbeitia 1989 from 152 white♂ +103 white♀ +172 black♂ +140 black♀ in Terry Collection

Radius *(ctd.)*	Distal breadth		*~27.9*		*~32.6*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<26.9	*~28.5*		*~32.7*	>34.1	Singh G. et al. 1974 from 92♂+ 39♀ Indian cadavers. Quoted in Krogman & Iscan 1986
Ulna	Maximum Length	<226.8	*~234.4*		*~261.9*	>278.8	Singh S.et al. 1974 from 191♂+ 54♀ Indian cadavers. Quoted in Krogman & Iscan 1986
			~214		*~239.7*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
			~230		*~265*		Olivier 1960, quoted in Acsádi & Nemeskéri, 1970
	Midshaft circumference	<33.7	*~37.1*		*~43*	>49.1	Singh S. et al. 1974 from 191♂+ 54♀ Indian cadavers. Quoted in Krogman & Iscan 1986
	Distal breadth	<13	*~16.7*		*~19*	>22.1	Singh S.et al. 1974 from 191♂+ 54♀ Indian cadavers. Quoted in Krogman & Iscan 1986
Hands							
MC1	Max. length	<43.5	*~41.6*		*~46.3*	>44	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<23	*~42.8*		*~46.8*	>52	Case & Ross 2007 from 136♂+ 123♀ white Americans in Terry Collection
	Interarticular length	<40	*~41.7*		*~44.12*	>45	Scheuer & Elkington 1993 from 33♂+ 26♀ white British cadavers
	Base M/L	<15.3	*~14.7*		*~16.4*	>15.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<14	*~13.9*		*~15.45*	>15	Scheuer & Elkington 1993 from 32♂+ 24♀ white British cadavers
	Base A/P	<15.5	*~14.5*		*~16.6*	>15.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<12.5	*~12.6*		*~13.7*	>14	Scheuer & Elkington 1993 from 32♂+ 24♀ white British cadavers
	Head M/L	<13.5	*~12.7*		*~14.7*	>13.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<14	*~13.7*		*~15*	>15	Scheuer & Elkington 1993 from 33♂+ 26♀ white British cadavers
	Head A/P	<13	*~13.2*		*~14.2*	>14.5	Scheuer & Elkington 1993 from 33♂+ 26♀ white British cadavers
	Midshaft M/L	<11	*~10.7*		*~12.1*	>12	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Midshaft A/P	<8	*~7.8*		*~9.1*	>8.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Max. midshaft diameter	<11.5	*~11*		*~12.5*	>12	Scheuer & Elkington 1993 from 33♂+ 26♀ white British cadavers

MC2	Max. length	<64.5	~61.8		~67.6	>64.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<58	~64.8		~69.9	>76	Case & Ross 2007 from136♂+ 123♀ white Americans in Terry Collection
	Interarticular length	<60	~62.8		~65.2	>68	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Base M/L	<17	~16		~18.4	>17	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<16	~15.5		~17.6	>17	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Base A/P	<16.5	~16		~17.9	>17	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<14	~15.4		~16.5	>17	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Head M/L	<13.5	~12.7		~14.4	>13.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<13.5	~13.8		~14.9	>15	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Head A/P	<13.5	~13.3		~14.6	>14.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<13.5	~14		~15	>15	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	MC2 midshaft M/L	<8	~7.6		~8.6	>8	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Midshaft A/P	<8.5	~8.5		~9.5	>9	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Max. midshaft diameter	<9	~8.9		~10	>10	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
MC3	Max. length	<62.5	~60.6		~66.3	>63.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<55	~63.4		~68.6	>77	Case & Ross 2007 based on 136♂+ 123♀ white Americans from Terry Collection
	Interarticular length	<59.5	~60.2		~63.3	>65	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Base M/L	<13.5	~13.1		~14.6	>14	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<13	~13.2		~14.5	>14.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Base A/P	<16	~15		~16.9	>16	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<14	~14.3		~15.9	>16	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers

MC3 *(ctd.)*	Head M/L	<13	*~12.4*		*~14*	>13.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<13	*~13.5*		*~14.6*	>15	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Head A/P	<13.5	*~13.3*		*~14.6*	>14.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<14	*~14.1*		*~15.3*	>15.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Midshaft M/L	<8	*~7.7*		*~8.5*	>8.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Midshaft A/P	<9	*~8.6*		*~9.5*	>9	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Max. midshaft diameter	<9	*~9.1*		*~10*	>10	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
MC4	Max. length	<54	*~52.1*		*~57.1*	>54.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<48.5	*~54.2*		*~58.7*	>65	Case & Ross 2007 based on 136♂+ 123♀ white Americans from Terry Collection
	Interarticular length	<53.5	*~54.9*		*~57*	>59.5	Scheuer & Elkington 1993 based on 33♂+ 26♀ white British cadavers
	Base M/L	<11.5	*~11.2*		*~12.7*	>12	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<11	*~11.8*		*~12.5*	>13	Scheuer & Elkington 1993 based on 33♂+ 25♀ white British cadavers
	Base A/P	<11.5	*~11.2*		*~12.7*	>12	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<10.5	*~10.7*		*~11.6*	>12	Scheuer & Elkington 1993 based on 33♂+ 25♀ white British cadavers
	Head M/L	<11	*~10.5*		*~12.1*	>11.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<11.5	*~11.6*		*~12.5*	>12.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Head A/P	<12	*~11.6*		*~13.1*	>12.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<12.5	*~12.5*		*~13.6*	>13.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Midshaft M/L	<6	*~6.2*		*~6.9*	>6.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Midshaft A/P	<7	*~6.8*		*~7.8*	>7.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Max. midshaft diameter	<7	*~7.2*		*~8*	>8	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers

MC5	Max. length	<51	*~49.4*		*~53.7*	>51.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<43.5	*~50*		*~54.8*	>60.5	Case & Ross 2007 based on 136♂+ 123♀ white Americans from Terry Collection
	Interarticular length	<50	*~50.6*		*~53*	>54.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Base M/L	<13.5	*~12.7*		*~14.3*	>13.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<10	*~10.5*		*~11.6*	>11.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Base A/P	<10.5	*~10.6*		*~11.6*	>11.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<10	*~10.6*		*~11.3*	>12	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Head M/L	<11	*~10.4*		*~11.7*	>11	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<11	*~11.3*		*~12.1*	>12.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Head A/P	<11.5	*~10.9*		*~12*	>11.5	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
		<11.5	*~11.5*		*~12.5*	>12.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
	Midshaft M/L	<7	*~7*		*~7.9*	>8	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Midshaft A/P	<6.5	*~6.5*		*~7.2*	>7	Barrio et al. 2006 based on 37♂+ 42♀ from Complutense University of Madrid
	Max. midshaft diameter	<7.5	*~7.7*		*~8.3*	>8.5	Scheuer & Elkington 1993 based on 33♂+ 27♀ white British cadavers
1st prox phalanx hand	Interarticular length	<28	*~28.3*		*~30.4*	>31	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Max. length	<24	*~29.6*		*~32.7*	>35.5	Case & Ross 2007 based on 136♂+ 123♀ white Americans from Terry Collection
	Base M/L	<13.5	*~13.7*		*~14.7*	>15	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Base A/P	<10	*~10.2*		*~11.2*	>11	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Head M/L	<12	*~12.2*		*~13.2*	>13	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Head A/P	<8	*~8.6*		*~9.2*	>9.5	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers
	Midshaft	<9	*~8.8*		*~9.9*	>9.5	Scheuer & Elkington 1993 based on 32♂+ 27♀ white British cadavers

1st dist phalanx hand	Max. length	<17.5	*~21.3*		*~24.1*	>27	Case & Ross 2007 based on 136♂+ 123♀ white Americans from Terry Collection
Lower limbs							
Femur	Head diameter	<42	*~43.8*		*~49.7*	>51	Dwight 1905 from 200♂+ 200♀ fresh bones with cartilage intact, Harvard medical school
			<42		>45		Ubelaker 1984:44
		<42.5	42.5-43.5	43.5-46.5	46.5-47.5	>47.5	Stewart 1979 from American Whites. Quoted in Bass 1995 +Krogman & Iscan 1986
		<46	*~44*		*~49*	>47	Mall et al. 2000 based on 100♂+ 70♀ femora from dissections at University of Koln +autopsies at University of Tubingen
		<41.5	41.5-43.5	43.5-44.5	44.5-45.5	>45.5	Pearson 1917/1919 based on bones from 17th century London
		<44	*~41.5*	44	*~47.2*	>44	Thieme 1957 based on 98♂+ 100♀ black Americans from Terry Collection
		<44.6				>44.6	Dittrick & Suchey 1986 from 175♂+ 171♀ prehistoric skeletons, Central California
		<37	*~39.8*		*~44.5*	>46	Asala 2001 based on 160♂ +100♀ black South Africans from Dart Collection
		<46				>47	Schulter-Ellis et al. 1983 & 1985 based on 50 black ♂ +50 black ♀ +50 white ♂ +50 white ♀, 97% accuracy
		<41	*~39.3*	41-43	*~45.1*	>43	King et al. 1998 from 70♂+ 34♀ Thais who died at Chiang Mai University Hospital
			~41		*~46.5*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<44		45-47	*~49*	>48	Parsons 1915 from 31♂+ 14♀ poor elderly white English with average height ♂=5'6 +♀=5'1
					~50.5		Jantz et al. 2008 from 31♂ Bosnians killed in the 1990s
			~44	46.741	*~49.5*		Jantz et al. 2008 from 446♂+ 73♀ Kosovans killed in the 1990s
		<43	*~41.6*	44-46	*~48.8*	>46	Holtby 1918 based on 56♂+ 44♀ femurs from the Anatomical Department, Trinity College, Dublin
		<45		45		>45	Iscan & Miller-Shaivitz 1984 from 56 white ♂ +55 white ♀ +52 black ♂ +61 black ♀ from Terry Collection. Quoted in Krogman & Iscan 1986
		<40				>47.5	Byers 2008, any ancestry
		<43.5	*~41.7*	43.5-46	*~49.2*	>46	Šlaus et al. 2003 from 104♂+ 191♀ identified victims of 1991 War in Croatia
		<42.5	42.5-43.5	43.5-46.5	46.5-47.5	>47.5	Stewart 1979 for white individuals in Terry Collection with amendments to Pearson's, also quoted in Byers 2008

Femur *(ctd.)*	Head diameter *(ctd.)*	<40	40-43	43-44	44-47	>47	Bass 1995 for black individuals, also quoted in Byers 2008.
		≤ 45				≥ 46	Schulter-Ellis et al. 1983 & 1985 based on 50 ♂ +50♀ black Americans from Terry Collection [96% accuracy] +50♂ +50♀ white Americans [97% accuracy]
			~40.4	42.9	*~45.3*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [85% accuracy]
		<45.5	*~43*		*~48.5*	>45.5	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
		<43.5				≥44.5	Acsádi & Nemeskéri 1970
	Head diameter horizontal	<35.1	*~39.8*		*~44.1*	>48.2	Singh S.P. & Singh 1972 based on Indian cadavers. Quoted in Krogman & Iscan 1986
	Bicondylar breadth	<72	72-74	74-76	76-78	>78	Pearson 1917/191 based on bones from 17th century London.
		<77.5				>77.5	Dittrick & Suchey 1986 from 151♂ +145♀ prehistoric skeletons, Central California.
		≤80	~74.8		~85.7	≥81	Based on 150♂ [88% accuracy] +100♀ [96% accuracy] white adults from Tennessee Data Bank.
		<65.9	*~71.1*		*~77.9*	>83.4	Singh S.P.& Singh 1972 based on Indian cadavers. Quoted in Krogman & Iscan 1986.
		<82	*~77*	82-83	*~84*	>83	Mall et al. 2000 based on 100♂+ 70♀ femora from dissections at University of Koln +autopsies at University of Tubingen
		<79	*~75.2*	79-82	*~86.7*	>82	Šlaus et al. 2003 based on 104♂+191♀ identified victims of 1991 War in Croatia
		<72		72-74		>74	Holtby 1918 based on 56♂+ 44♀ femurs from the Anatomical Department, Trinity College, Dublin
			~69.3	73.5	*~77.8*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [84% accuracy]
			~70.4		*~80.2*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<73.5	*~70*	73.5-76	*~79.7*	>76	King et al. 1998 from 70♂+ 34♀ Thais who died at Chiang Mai University Hospital
		<78.5	*~75.1*	78.5-80	*~84.6*	>80	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
		<70	*~69*	70-75	*~79*	>75	Parsons 1915 from 31♂+ 14♀ poor elderly white English with average height ♂=5'6 +♀=5'1

Femur *(ctd.)*	Trochanteric oblique length	<400	*~412.5*		*~454*	>460	Holtby 1918 based on 56♂+ 44♀ femurs from the Anatomical Department, Trinity College, Dublin
			~369.3	386.5	*~403.8*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [75% accuracy]
		<390	390-405	405-430	430-450	>450	Pearson 1917/1919 based on bones from 17th century London.
	Length	≤435	*~423*		*~450*	≥436	DiBennardo & Taylor 1979 based on 50♂+ 35♀ white documented dissected cadavers, New York.
			~443		*~475*		DiBennardo & Taylor 1982 from 65♂+ 65♀ black North Americans, Terry Collection.
		<367.6	*~400.2*		*~438.4*	>458.1	Singh S.P.& Singh 1972 based on Indian cadavers. Quoted in Krogman & Iscan 1986
	Popliteal length	<106	106-114.5	114.5-132	132-145	>145	Pearson 1917/1919 based on bones from 17th century London.
	Max. length	415.5				*449.5*	Dwight 1905 from 200♂ +200♀ bones, Harvard medical school.
		<442	*~437.6*		*~469.7*	>458	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
		<449	*~439.1*	449-464	*~477.3*	>464	Thieme 1957 based on 98♂+ 100♀ black Americans from Terry Collection.
		<447	*~439.4*		*~469.6*	>455.5	Šlaus et al. 2003 from104♂+ 191♀ identified victims of 1991 War in Croatia
					~469.9		Jantz et al. 2008 from 532♂ Bosnians killed in the 1990s
		<439	*~418.1*		*~462.5*	>442	Jantz et al. 2008 based on 532♂+ 92♀ Kosovans killed in the 1990s
			<435.2		>435.2		Dittrick & Suchey 1986 from 148♂+ 145♀ prehistoric skeletons, Central California.
		<440	*~434*		*~464*	>458	Mall et al. 2000 based on 100♂+ 70♀ femora from dissections at University of Koln +autopsies at University of Tubingen
		<400		401-440	>440	>450	Parsons 1915 from 31♂+ 14♀ poor elderly white English with average height ♂=5'6 +♀=5'1
		<408	*~397*		*~429.4*	>416.5	King et al. 1998 from70♂+ 34♀ Thais who died at Chiang Mai University Hospital
		<400	*~415*		*~457*	>460	Holtby 1918 based on 56♂+ 44♀ femurs from the Anatomical Department, Trinity College, Dublin
			~394.1	412.7	*~431.3*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [79% accuracy]
		≤445				≥445.6	Black 1978 based on Native Americans from Libben, Ohio [89.4% accuracy].

Femur *(ctd.)*	Midshaft anterior-posterior diameter	<25	*~24.7*		*~27.8*	>26.5	King et al. 1998 from 70♂+ 34♀ Thais who died at Chiang Mai University Hospital
		<28	*~26.8*		*~30.8*	>29	Šlaus et al. 2003 from 104♂+ 191♀ identified victims of 1991 War in Croatia
		<29	*~28.2*		*~31.3*	>31	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
			~23.7	25.3	*~27*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [79% accuracy]
			<28		>28		Dittrick & Suchey 1986 from 148♂+ 146♀ prehistoric skeletons, Central California.
	Midshaft tranverse diameter	<26.5	*~27.4*		*~28.8*	>29.5	Šlaus et al. 2003 from104♂+ 191♀ identified victims of 1991 War in Croatia
		<23	*~23.3*		*~25.3*	>26	King et al. 1998 from 70♂+ 34♀ Thais who died at Chiang Mai University Hospital
			~24.2	25.5	*~26.7*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [73% accuracy]
		<27	*~26.3*		*~29.1*	>28	Steyn & Iscan 1997 from 56♂+ 50♀ white South Africans in Dart & Pretoria Collections
	Circumference midshaft	<81		81		>81	Black 1978 based on Native Americans from Libben site, Ohio. 85% accuracy.
		<87	*~84.7*		*~93.2*	>90	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
		≤85	*~82*		*~90*	≥86	DiBennardo & Taylor 1979 based on 50♂+ 35♀ white documented dissected cadavers, New York.
		<79	*~75.4*		*~83.7*	>81	King et al. 1998 from 70♂+ 34♀ Thais who died at Chiang Mai University Hospital
			~75.7	80.2	*~84.6*		Liu 1989 based on 74♂+ 67♀ modern Chinese, some documented others estimated [79% accuracy]
			~83		*~89*		DiBennardo & Taylor 1982 from 65♂+ 65♀ black North Americans in Terry Collection.
			<82.4		>82.4		Dittrick & Suchey 1986 from 146♂ +143♀ prehistoric skeletons, Central California.
	Shaft minimum transverse diameter	<24	*~24.8*	24-27	*~27.8*	>27	Holtby 1918 based on 56♂+ 44♀ femurs from the Anatomical Department, Trinity College, Dublin
		<25	*~26*	25-29	*~28*	>29	Parsons 1915 from 31♂+ 14♀ poor elderly white English with average height ♂=5'6 +♀=5'1
			~23.3		*~26.5*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo

Patella	Height		*~37*		*~41.2*		Introna Jr. et al. 1998 from 40♂+40♀ from Southern Italy
		<38.85	*~36.5*	38.85	*~41.2*	>38.85	Dayal and Bidmos 2005 based on 60♂+ 60♀ black South Africans from Dart Collection [79.2% accuracy]
	Width		*~39.4*		*~43.2*		Introna Jr. et al. 1998 from 40♂+40♀ from Southern Italy
		<41.16	*~39*	41.16	*~43.3*	>41.16	Dayal and Bidmos 2005 based on 60♂+ 60♀ black South Africans from Dart Collection [80% accuracy]
	Thickness		*~18.3*		*~20.4*		Introna Jr. et al. 1998 from 40♂+40♀ from Southern Italy
		<19.38	*~18.2*	19.38	*~20.6*	*>19.38*	Dayal and Bidmos 2005 based on 60♂+ 60♀ black South Africans from Dart Collection [77.5% accuracy]
Tibia	Proximal breadth	*~68.4*	<73	73-74	>74	*~75.5*	İşcan & Miller-Shaivitz 1984 from 40♂ [82.5% accuracy] +39♀ [92.3% accuracy] white adults from Terry Collection.
		<74	*~69.8*		*~79.1*	>74	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
			<74	74-75	>75		İşcan & Miller-Shaivitz 1984 based on 40♂+ 40♀ black adults from Terry Collection [86.3% accuracy].
		<73	*~68.4*		*~75.5*	>74	İşcan & Miller-Shaivitz 1984 from 40♂+ 39♀ white Americans, Terry Collection
			~65.5		*~74.8*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		~70.7	<75.1	75.1	>75.1	*~79.6*	Symes & Jantz 1983 for Whites. Quoted in Bass 1995 [88.75% accuracy]
		<70.5	*~65.8*		*~73.5*	>70.5	İşcan et al. 1994 from 44♂ [95.6% accuracy]+34♀ [79.4% accuracy] Japanese adults.
		<65.1	*~64.4*		*~73.3*	>76.7	Singh G. et al. 1975 based on 176♂+ 68♀ cadavers from India [100% accuracy using demarking points]
	Max. length	<346	*~350.2*		*~371*	>375	İşcan & Miller-Shaivitz 1984 from 40♂+ 39♀ white Americans in Terry Collection
		<318	*~310.1*		*~333.6*	>331	İşcan & Miller-Shaivitz 1984 from 44♂ [87% accuracy] +34♀ [89.4% accuracy] Japanese adults
			~299.3		*~329.1*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<314.5	*~341.5*		*~373*	>404.2	Singh G. et al. 1975 based on 176♂+ 68♀ cadavers from India [100% accuracy using marking points]

Tibia *(ctd.)*	Circumference at nutrient foramen	*~86.4*	<91	91-92	>92	*~93.1*	İşcan & Miller-Shaivitz 1984 based on 40♂ [75% accuracy] +39♀ [79.5% accuracy] white adults from Terry Collection.
		~84.3	<90.2	90.2	>90.2	*~96*	Symes & Jantz 1983 for Whites. Quoted in Bass 1995. [82.5% accuracy]
		<90	*~86.4*		*~96.2*	>94	İşcan & Miller-Shaivitz 1984 from 40♂+ 39♀ white Americans, Terry Collection
		<87	*~82.4*		*~91.6*	>91	İşcan & Miller-Shaivitz 1984 from 44♂ +34♀ Japanese
			<95	95-96	>96		İşcan & Miller-Shaivitz 1984 based on 40♂+ 40♀ black adults from Terry Collection. [80% accuracy]
	Midshaft circumference	<61.2	*~65.7*		*~76.4*	>81.6	Singh G. et al. 1975 based on 176♂+ 68♀ cadavers from India [100% accuracy using demarking points]
		<91	*~87.5*		*~98*	>93.5	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
			<91	91-92	>92		İşcan & Miller-Shaivitz 1984 based on 40♂+ 40♀ white adults from Terry Collection [77.2% accuracy]. Quoted in France 1998
	Antero-posterior midshaft diameter	<31	*~30.6*		*~34.6*	>33.3	İşcan & Miller-Shaivitz 1984 from 40♂+ 39♀ white Americans, Terry Collection
		<30	*~30.3*		*~30.3*	>36	İşcan & Miller-Shaivitz 1984 based on 44♂ +34♀ Japanese adults from Terry Collection.
			~25.6		*~29.95*		Hanihara 1958 based on 48♂+ 40♀ Japanese, Dept of Anatomy, Tokyo
		<34	*~32.6*		*~36.9*	>35	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
	Transverse midshaft diameter	<22	*~30.3*		*~24.6*	>24	İşcan & Miller-Shaivitz 1984 based on 44♂+34♀ Japanese
		<22.5	*~23.7*		*~26.6*	>27	İşcan & Miller-Shaivitz 1984 from 40♂+ 39♀ white Americans, Terry Collection
		<23	*~23.2*		*~26.1*	>25	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections

Tibia (ctd.)	Distal breadth	*~43.6*	<44	44-45	>45	*~47.8*	İşcan & Miller-Shaivitz 1984 from 40♂ [82.5% accuracy] +39♀ [87.2% accuracy] white adults in Terry Collection
			<45	45-46	>46		İşcan & Miller-Shaivitz 1984 from 40♂+ 40♀ black adults in Terry Collection [80% accuracy]
		~46.2	<49.2	49.2	>49.2	*~52.2*	Symes & Jantz 1983 for Whites. Quoted in Bass 1995:250 [86.25% accuracy]
		<47	*~44.4*		*~50.2*	>47	Steyn & Iscan 1997 from 56♂ +50♀ white South Africans in Dart & Pretoria Collections
		<43	*~40.5*		*~45.3*	>43	İşcan & Miller-Shaivitz 1984 based on 44♂ [87% accuracy] +34♀ [89.4% accuracy] Japanese adults
		<28	*~42.6*		*~47.7*	>50.4	Singh G. et al. 1975 from 176♂+ 68♀ Indian cadavers [100% accuracy using demarking points]
Fibula	Length	<314.7	*~326*		*~362*	>383	Singh G. & Singh S.P. 1976 from 224♂+ 80♀ cadavers from India. [100% accuracy using demarking points]
	Midshaft circumference	<24.1	*~34.9*		*~40.3*	>45.5	Singh G. & Singh S.P. 1976 from 224♂+ 80♀ cadavers from India. [100% accuracy using demarking points]
	Distal end width	<17.7	*~21.8*		*~24.5*	>26.1	Singh G. & Singh S.P. 1976 from 224♂+ 80♀ cadavers from India. [100% accuracy using demarking points]
Feet							
Calcaneus	Max. length	<76.5	*~75.7*		*~81.9*	>80	Steele 1976 from 30 white♂+ 29 white♀ +30 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
		<80	*~75.9*		*~84.5*	>80	Bidmos & Asala 2003 from 53♂+ 60♀ white South Africans in Dart Collection
		<76	*~73.7*	76.8	*~79.8*	>78.5	Bidmos & Asala 2003 from 58♂ +58♀ black South Africans in Dart Collection. [76% accuracy using sectioning point]
	Min. width	<25	*~25.4*		*~28.1*	>28	Steele 1976 from 30 white♂+ 29 white♀ +30 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
		<20	*~19.4*	20-22	*~22.3*	>22	Bidmos & Asala 2003 from 53♂+ 60♀ white South Africans in Dart Collection
	Body height	<37	*~36*	37-38	*~39.4*	>38	Bidmos & Asala 2003 from 53♂+ 60♀ white South Africans in Dart Collection
		<33.5	*~33.8*	35.1	*~36.3*	>37	Bidmos & Asala 2003 from 58♂ +58♀ black South Africans in Dart Collection [69% accuracy using sectioning point]
		<40	*~39.5*		*~43.6*	>43	Steele 1976 from 30 white♂+ 29 white♀ +30 black ♂+ 30 black♀ from Terry Collection. Actual ranges overlap greatly

Calcaneus *(ctd.)*	Load arm length	<47	*~46.5*		*~50.6*	>49	Steele 1976 from 30 white♂+ 29 white♀ +30 black ♂+ 30 black♀ from Terry Collection
		<41.5	*~41*	42.6	*~44.2*	>44	Bidmos & Asala 2003 from 58♂+ 58♀ black South Africans in Dart Collection [75% accuracy using sectioning point]
		<45	*~43.3*	45-46	*~48.2*	>46	Bidmos & Asala 2003 from 53♂+ 60♀ white South Africans in Dart Collection
	Load arm width	<40	*~38.7*		*~42.7*	>41	Steele 1976 from 30 white♂+ 29 white♀ +30 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
Talus	Max. length	<52	*~49.4*		*~55.2*	>52	Steele 1976 from 28 white♂+ 29 white♀ +33 black ♂+ 30 black♀ in Terry Collection [81% accuracy]
		<49	*~47.1*	49.37	*~51.7*	>50	Bidmos & Dayal 2004 from 60♂ +60♀ black South Africans in Dart Collection [80.8% accuracy using sectioning point]
		<53	*~51.1*	53.36	*~55.6*	>54	Bidmos & Dayal 2003 from 60♂+ 60♀ white South Africans in Dart Collection
	Max. width	<40	*~38.6*		*~43*	>40.5	Steele 1976 from 28 white♂+ 29 white♀ +33 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
		<39	*~37.6*		*~41.5*	>40	Bidmos & Dayal 2004 from 60♂+ 60♀ black South Africans in Dart Collection
		<40	*~39*	40.63	*~42.3*	>42	Bidmos & Dayal 2003 from 60♂+ 60♀ white South Africans in Dart Collection
	Height	<30	*~29.5*		*~32.5*	>31	Steele 1976 from 28 white♂+ 29 white♀ +33 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
		<31	*~30.7*	32.09	*~33.4*	>33	Bidmos & Dayal 2003 from 60♂+ 60♀ white South Africans in Dart Collection
	Trochlea length	<32.5	*~32.9*		*~35.9*	>36	Steele 1976 from 28 white♂+ 29 white♀ +33 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly
	Trochlea width	<30	*~28.8*		*~32.2*	>31	Steele 1976 from 28 white♂+ 29 white♀ +33 black ♂+ 30 black♀ in Terry Collection. Actual ranges overlap greatly

MT1	Max. length	<63	*~61.7*		*~66.5*	>65	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
		<56	*~59.9*		*~64.3*	>74	Case & Ross 2007 from 136♂+ 123♀ white Americans in Terry Collection
	Head height	<20	*~19.7*		*~22*	>21	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Head width	<22	*~20.8*		*~23.7*	>22	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base height	<30	*~28.3*		*~31.5*	>30	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base width	<21	*~19.2*		*~22.5*	>21	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Midshaft diameter	<13	*~12.2*		*~14.3*	>13	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
MT2	Max. length	<75.5	*~73.8*		*~80*	>78	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
		<65.5	*~71.5*		*~76.6*	>84	Case & Ross 2007 from 136♂+ 123♀ white Americans in Terry Collection
	Head height	<15.5	*~14.7*		*~16.8*	>16	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Head width	<10.5	*~10*		*~11.6*	>11	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base height	<21	*~19.8*		*~22.1*	>21	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base width	<15	*~14.5*		*~16.4*	>15	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Midshaft diameter	<7	*~7.9*		*~8.5*	>9	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection

MT3	Max. length	<70	*~69*		*~74.8*	>73	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
		<52	*~66.9*		*~71.5*	>80	Case & Ross 2007 from 136♂+ 123♀ white Americans in Terry Collection
	Head height	<15	*~14.1*		*~16.2*	>15.5	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Head width	<10.5	*~8.7*		*~10.1*	>11	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base height	<20	*~19*		*~21.3*	>20	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base width	<13.5	*~13.1*		*~14.8*	>14	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Midshaft diameter	<6.5	*~6.4*		*~7.5*	>7	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
MT4	Max. length	<69	*~67.6*		*~73.4*	>71	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
		<51	*~65.7*		*~70.4*	>77	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
	Head height	<13	*~13.3*		*~15.4*	>14	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Head width	<9	*~8.7*		*~10.3*	>9.5	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base height	<16.5	*~16*		*~18*	>17.5	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base width	<11	*~11*		*~12.1*	>12	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Midshaft diameter	<6.5	*~6.5*		*~7.4*	>7.5	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection

MT5	Max. length	<69	*~68.3*		*~73.8*	>72	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
		<60.5	*~67.2*		*~72.6*	>78	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
	Head height	<12	*~11.9*		*~14*	>13	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Head width	<13	*~8.6*		*~10.4*	>9.5	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base height	<13.5	*~13*		*~14.8*	>14	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Base width	<20	*~19.2*		*~21.5*	>21	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
	Midshaft diameter	<7	*~7*		*~8.1*	>8	Robling & Ubelaker 1997 based on 48 white♂+ 48 white♀ +52 black ♂+ 52 black♀ from Terry Collection
1st prox foot phalanx	Max. length	<29	*~33*		*~36.2*	>42	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
2nd prox foot phalanx	Max. length	<25	*~28*		*~30.7*	>34	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
3rd prox foot phalanx	Max. length	<22	*~25.5*		*~28.1*	>31	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
4th prox foot phalanx	Max. length	<22	*~23.9*		*~26.3*	>29	Case &Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
5th prox foot phalanx	Max. length	<21	*~22.6*		*~25*	>27	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection
1st dist foot phalanx	Max. length	<20.5	*~23.9*		*~27*	>32	Case & Ross 2007 from 136♂ +123♀ white Americans in Terry Collection

All data adapted by the author from the references quoted

Measurements in italic = means

A/P = anterio-posterior, M/L = medio-lateral

Appendix 2

Estimation of fetal body length from bone measurements (all in cm)

Cranial vault (Fazekas & Kósa 1978:126-127; Kósa 1989:32)

Body length = Squama frontalis height x 8.87 + 1.25
Body length = Squama frontalis width x 12.01 – 4.21
Body length = Squama temporalis height x 17.52 + 6.12
Body length = Squama temporalis width x 15.80 - 1.46
Body length = Tympanic ring diameter x 48.28 - 11.79
Body length = Parietal bone height x 7.43 + 1.56
Body length = Parietal bone width x 6.79 + 0.61
Body length = Squama occipitalis height x 8.26 + 4.87
Body length = Squama occipitalis width x 8.56 + 0.83

Cranial base bones (Fazekas & Kósa 1978:155-158; Kósa 1989:36)

Body length = Lesser wing length x 22.34 + 8.85 *
Body length = Lesser wing width x 41.44 + 2.89 *
Body length = Greater wing length x 16.11 + 1.33
Body length = Greater wing width x 26.45 + 4.16
Body length = Body of sphenoid bone length x 39.09 + 6.01
Body length = Body of sphenoid bone width x 26.02 + 3.87
Body length = Petrous part of temporal bone length x 11.71 + 8.00
Body length = Petrous part of temporal bone width x 26.22 + 4.10
Body length = Basilar part of the occipital bone length x 42.97 – 5.86
Body length = Basilar part of the occipital bone width x 30.96 + 5.94
Body length = Lateral part of occipital bone length x 18.60 + 7.04
Body length = Lateral part of occipital bone width x 32.81 + 7.82

Facial bones (Fazekas & Kósa 1978:191; Kósa 1989:39)

Body length = Nasal length x 39.48 + 2.23
Body length = Nasal width x 75.07 + 0.52
Body length = Vomer length x 15.93 + 2.91
Body length = Inferior concha length x 19.67 + 14.85 *
Body length = Palatine bone length x 34.63 – 0.02 *
Body length = Zygomatic bone length x 19.77 + 0.45
Body length = Zygomatic bone width x 26.76 – 1.89
Body length = Maxilla length x 20.81 – 0.38 *
Body length = Maxilla height x 19.74 + 1.66
Body length = Maxilla width x 20.79 – 1.42
Body length = Maxilla greatest length x 16.13 – 2.97 *
Body length = Body of mandible length x 14.47 – 0.58
Body length = Mandible width x 26.64 + 3.10
Body length = Half mandible full length x 10.78 – 1.73

Body length (cm) = (half) mandible length (mm) [1978:165 and 1989:39]
Body length (cm) = zygomatic length (mm) x 2 [1978:193 and 1989:39]
Body length (cm) = maxilla length (mm) x 2 [1978:165,193 and 1989:38 *with error on p50*]
Body length (cm) = maxilla width (mm) x 2 [1978:192]
Body length (cm) = [(maxilla length (mm)+maxilla height (mm)+maxilla width (mm)) /3]x2 [1978:192 and 1989:39]

Ribs (Fazekas & Kósa 1978:205; Kósa 1989:39-40)

Body length = 1st rib length x 20.53 + 2.68
Body length = 2nd rib length x 12.70 + 0.64
Body length = 3rd rib length x 11.84 – 2.13
Body length = 4th rib length x 8.52 + 1.27
Body length = 5th rib length x 8.18 – 0.33
Body length = 6th rib length x 7.97 + 0.00
Body length = 7th rib length x 7.67 + 1.43
Body length = 8th rib length x 8.15 + 1.93
Body length = 9th rib length x 8.87 + 2.65
Body length = 10th rib length x 10.07 + 3.44
Body length = 11th rib length x 12.08 + 5.14
Body length = 12th rib length x 21.13 + 7.09

Body length (cm) = (1st rib length (mm) x 2) + 3
Body length (cm) = 3rd rib length (mm)
Body length (cm) = 10th rib length (mm) + 3

Shoulder and Pelvic Bones (Fazekas & Kósa 1978:231; Kósa 1989:43)

Body length = clavicle length x 11.94 – 1.22
Body length = scapula length x 14.32 + 1.52
Body length = scapula width x 16.66 + 2.96
Body length = spine of scapula length x 15.73 + 2.32
Body length = ilium length x 14.24 + 4.05
Body length = ilium width x 15.07 + 6.23
Body length = ischium length x 20.85 + 13.86
Body length = ischium width x 33.67 + 11.11
Body length = pubic bone length x 21.50 + 17.89

Diaphyseal size of Extremity Bones (Fazekas & Kósa 1978:264; Kósa 1989:44-45)

Body length = humerus length x 7.52 + 2.47
Body length = humerus width x 28.30 + 3.95
Body length = radius length x 10.61 – 2.11
Body length = ulna length x 8.20 + 2.38
Body length = femur length x 6.44 + 4.51
Body length = femur width x 22.63 + 7.57
Body length = tibia length x 7.24 + 4.90
Body length = fibula length x 7.59 + 4.68

Body length (cm) = radius length (mm)

Small Bones (Fazekas & Kósa 1978:271; Kósa 1989:48)

Body length = 1st metacarpal length (cm) x 42.75 + 11.87
Body length = 1st metatarsal length (cm) x 29.38 + 12.69
Body length = Arch of atlas length (cm) x 34.35 + 3.04
Body length = Arch of axis length (cm) x 25.83 + 5.57
Body length = Malleus length (mm) x 6.25 – 2.01 [± 2-3 cm]
Body length = Incus length (mm) x 10.49 – 32.33 [± 2-3 cm]
Body length = Incus width (mm) x 8.70 – 2.80 [± 2-3 cm]
Body length = Stapes length (mm) x 11.63 + 4.85 [± 2-3 cm]
Body length = Stapes width (mm) x 18.67 – 6.96 [± 2-3 cm]

*not mentioned in Kósa 1989

Appendix 3

Estimation of age from maximum diaphyseal length

Data gathered and interpreted by the author from the original articles, tables and graphs and subsequent reproductions in other works (Maresh 1955; Johnston 1962; Maresh 1970; Merchant & Ubelaker 1977; Stloukal & Hanáková 1978; Sundick 1978; Hoffman 1979; Ubelaker 1984; Mays 1999; Scheuer & Black 2000; Byers 2008; Schaefer *et al.* 2009). All measurements given in mm. Data in bold indicates mean maximum diaphyseal length at each age. Intervals for each population at each age are given based on minimum and maximum when possible, or on standard deviations if actual intervals were unavailable. Age cohort with only a mean and no interval present signify that there was only one measurement available from that population for this cohort. Further explanations for each method and each population can be found in Part I, Chapter 3, section 3.2.2.

Humerus

	Stloukal & Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant & Ubelaker	Hoffman	Maresh
3 mths	**72.4**	**78.0**	**67.4**	**67.66**	**70.5**	**70**	**72.1**
	64-84		55-79	62-74	64-89	62-80	66-78
6 mths	**88.1**					**80**	**87.6**
	78-97					72-88	80-95
1 yr	**97.9**	**95.5**	**94.6**	**93.14**	**102.3**	**100**	**104.6**
	89-106	81-110	80-116	81-106	84-119	88-112	97-112
1.5 yrs	**108.6**	**125.0**	**115.6**			**116**	**117.9**
	98-118		103-127			106-127	110-126
2 yrs	**117.5**		**120.4**	**113.57**	**129.5**	**130**	**128.9**
	106-129		106-132	108-119	121-138	116-140	120-138
3 yrs	**133.5**	**130.7**	**128.0**	**125.64**	**139.5**	**147**	**146.4**
	120-147	128-135	112-139	119-133	118-157	132-160	136-156
4 yrs	**142.7**	**149.2**	**145.4**	**136.78**	**156.5**	**164**	**161.8**
	128-159	139-160	135-157	131-142	154-159	146-181	151-171
5 yrs	**152.4**	**179.0**	**153.5**	**154.67**	**167.6**	**180**	**176.9**
	136-170		135-161	149-160	161-180	160-196	165-189
6 yrs	**163.8**	**186.3**	**169.0**		**180.1**	**193**	**190.5**
	147-181	175-197	150-192.5		173-192	172-212	178-204
7 yrs	**174.8**	**189.8**	**185.8**		**192.1**	**207**	**203.1**
	157-192				188-204	184-225	190-216
8 yrs	**184.6**	177-216	164-205		**211.8**	**222**	**216.8**
	169-201				207-217	195-240	202-231
9 yrs	**194.3**	**212.7**	**206.4**			**231**	**228.4**
	178-210					207-259	212-244
10 yrs	**203.9**	203-225	184-229		**228.6**	**243**	**240.4**
	186-218				225-235	216-270	223-258
11 yrs	**211.9**	**245.0**	**201.5**		**245**	**260**	**251.8**
	196-224					226-287	232-275
12 yrs	**219.9**	**222.7**	**222.5**		**254.5**		**264.3**
	202-234	220-227	216-229		251-258		245-286
13 yrs	**231.2**	**240.0**	**223.0**				
	211-247	213-258	201-249				
14 yrs	**240.8**	**247.8**	**239.8**				
	220-257	232-280	233-246.5				
15 yrs	**257.7**	**279.0**	**260.0**		**255.5**		
	237-274						

Radius

	Stloukal& Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant &Ubelaker	Gindhart	Hoffman	Maresh
3 mths	**58.5**	**61.0**	**54.8**	**55.05**	**57.4**	**61.2**	**61**	**64.7**
	56-61		46-64	51-59	49-74	56-65	55-68	60-70
6 mths	**69.7**					**68.3**	**68**	**69.2**
	63-75					63-73	62-76	64-76
1 yr	**76.8**	**63.0**	**75.3**	**73.96**	**81.0**	**80.9**	**78**	**80.8**
	68-85		65-89	66-82	67-92	75-87	72-87	75-88
1.5 yrs	**84.1**		**91.6**			**91.0**	**88**	**89.5**
	75-90		81-99			85-99	81-97	86-97
2 yrs	**89.8**	**98.0**	**97.0**	**91.33**	**97.1**	**98.8**	**95**	**96.8**
	80-96		88-105	87-96	84-104	92-105	87-105	89-105
3 yrs	**101.6**	**96.3**	**100.9**	**97.86**	**106.3**	**112.6**	**108**	**109.7**
	93-110	95-98	91-110	91-104	94-119	105-120	98-118	100-118
4 yrs	**108.3**	**113.4**	**109.3**	**108.5**	**118.3**	**124.4**	**120**	**121.2**
	98-120	106-126	96-121	106-111	116-121	116-133	108-132	111-130
5 yrs	**116.0**	**134.0**	**120.1**	**120.0**	**128.1**	**135.9**	**130**	**132**
	105-130		112-125	117-123	125-133	127-145	117-144	120-142
6 yrs	**125.1**	**148.3**	**133.3**		**140.6**	**147.1**	**140**	**141.9**
	114-140	146-153	121-150		135-149	137-157	125-155	130-151
7 yrs	**133.5**	**144.8**	**143.8**		**149.5**	**157.2**	**150**	**151.2**
	121-152				146-153	146-168	134-166	139-162
8 yrs	**141.9**	135-159	128-154		**168**	**167.2**	**159**	**160.9**
	130-160					156-178	142-176	148-172
9 yrs	**149.2**	**156.8**	**159.4**			**177.3**	**168**	**169.5**
	139-163					165-189	149-187	156-181
10 yrs	**156.9**	148-170	147-175		**185.7**	**187.0**	**177**	**178.7**
	149-168				178-196	174-199	156-199	163-190
11 yrs	**163.3**	**183.0**	**160.0**		**189**	**197.4**	**187**	**187.4**
	156-175					183-209	163-212	171-202
12 yrs	**168.8**	**174.0**	**182.3**		**190.9**	**208.7**	**197**	**197.2**
	160-179	170-178	161-202		170-200	195-221	170-222	181-213
13 yrs	**175.7**	**190.0**	**174.0**			**218.9**		
	165-188	182-196	155-196			205-234		
14 yrs	**182.5**	**192.7**	**199.4**			**228.9**		
	166-200	?*-218	183-217			212-250		
15 yrs	**192.5**	**210.0**	**202.8**			**236.0**		
	171-209		199-207			215-260		
16 yrs			**211.5**			**240.9**		
						218-265		
17 yrs			**236.0**			**241.9**		
						217-268		
18 yrs						**243.3**		
						219-268		
21 yrs			**225.0**					

*mistake in the article, where the maximum was printed twice instead of the minimum and the maximum

Ulna

	Stloukal & Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant & Ubelaker	Hoffman	Maresh
3 mths	**65.3**		**63.2**	**63.7**	**66.1**	**69**	**72.5**
	64-68		53-72	59-68	60-83	60-75	67-78
6 mths	**75.9**					**76**	**77.4**
	72-80					66-82	70-84
1 yr	**83.1**	**71.0**	**83.7**	**82.9**	**92.1**	**88**	**90.8**
	79-86		74-100	74-92	75-103	81-95	84-98
1.5 yrs	**91.1**		**101.9**			**100**	**100.6**
	85-95		92-110			90-107	93-107
2 yrs	**98.5**	**108.0**	**107.5**	**99.2**	**108.5**	**107**	**108.4**
	93-102		98-114	97-101	94-116	96-116	101-115
3 yrs	**111.4**	**105.0**	**111.9**	**108.0**	**117.9**	**121**	**122**
	104-117	103-107	101-125	102-114	100-130	109-130	113-130
4 yrs	**119.8**	**120.3**	**120.5**	**120.6**	**129.8**	**132**	**134.4**
	111-129	116-123	115-127	116-125	127-133	120-145	124-143
5 yrs	**128.0**		**132.2**	**132.8**	**142.8**	**145**	**145.8**
	118-139		121-138	129-136	140-146	130-160	135-155
6 yrs	**137.3**	**155.8**	**147.5**		**153.8**	**156**	**156.2**
	125-152	144-160	131-164		145-166	140-170	145-165
7 yrs	**147.2**	**159.5**	**158.9**		**167.1**	**166**	**166.1**
	134-164				161-175	150-182	154-176
8 yrs	**157.1**	149-175	144-170		**180.0**	**175**	**176.1**
	145-174				176-184	158-192	164-186
9 yrs	**154.4**	**182.5**	**174.7**			**186**	**185.4**
	154-178					167-204	172-198
10 yrs	**172.4**	175-190	160-194		**201.5**	**194**	**195.3**
	163-186				195-213	172-215	180-209
11 yrs	**178.1**		**180.0**			**205**	**204.9**
	169-193					182-229	190-222
12 yrs	**182.9**	**191.3**	**188.8**		**217.5**	**215**	**215.5**
	173-198	185-195	180-198		216-219	189-240	199-233
13 yrs	**190.7**	**201.5**	**187.3**				
	178-208	200-203	172-205				
14 yrs	**198.0**	**205.0**	**223.7**				
	183-221	200-210	200-242				
15 yrs	**212.1**	**233.0**	**219.5**				
	196-233		215-244				

Femur

	Stloukal & Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant & Ubelaker	Mays	Hoffman	Maresh
3 mths	**85.3**	**93.0**	**80.0**	**78.8**	**82.2**			**100.8**
	75-103		77-94.5	72-86	63-106			94-107
6 mths	**108.1**						**112**	**111.7**
	95-122						100-130	105-118
1 yr	**122.0**		**118.3**	**115.6**	**126.9**	**125.5**	**136**	**135.6**
	109-135		95-147	97-134	93-161	115-136	120-155	128-143
1.5 yrs	**137.5**	**162.0**	**148.9**				**158**	**154.7**
	122-152		132-166				144-176	145-164
2 yrs	**149.6**	**165.0**	**156.4**	**148.1**	**167.1**	**151.9**	**176**	**171.6**
	135-166		140-169	137-159	141-186	142-162	162-192	162-181
3 yrs	**174.1**	**168.7**	**168.5**	**166.7**	**185.1**	**173.1**	**202**	**199.4**
	156-196	168-169	146-183	157-177	155-215	160-186	187-222	188-212
4 yrs	**188.3**	**200.2**	**190.2**	**183.8**	**213.0**	**186.0**	**227**	**223.7**
	169-213	176-221	165-209	175-193	208-218	174-198	208-250	210-238
5 yrs	**203.2**	**222.3**	**211.0**	**213.7**	**234.3**	**195.5**	**252**	**247.3**
	183-230	202-249	183-225	209-218	225-243	186-205	228-276	233-263
6 yrs	**221.1**	**250.0**	**236.0**		**248.6**	**214.6**	**274**	**269.3**
	198-246	226-277	209-270		236-277	202-227	248-302	252-288
7 yrs	**238.1**	**264.5**	**263.1**		**262.0**	**241.9**	**294**	**290**
	214-263				252-274	218-266	265-322	273-308
8 yrs	**253.0**	243-299	235-287		**292.8**	**262.3**	**315**	**311**
	228-278				285-301	246-279	285-347	290-331
9 yrs	**266.5**	**293.8**	**294.4**			**272.7**	**332**	**329.6**
	241-290					259-287	300-372	305-352
10 yrs	**281.2**	278-323	254-331		**321.0**	**285.0**	**352**	**348.6**
	254-305				320-322	259-311	312-355	324-374
11 yrs	**292.5**	**325.0**	**281.0**		**342.0**	**300.3**	**372**	**367**
	265-323					276-324	325-420	339-402
12 yrs	**302.9**	**323.3**	**328.0**		**344.5**	**306.0**		**386.9**
	279-337	216-336	295-355		339-350	293-319		359-416
13 yrs	**319.0**	**352.3**	**321.7**					
	286-358	310-377	287-361					
14 yrs	**333.3**	**353.0**	**366.1**			**346.0**		
	296-382	230-397	339-406			334-358		
15 yrs	**358.2**		**373.2**		**356.5**			
	325-403		364-385		345-368			
16 yrs			**379.0**					
17 yrs			**437.0**			**376.9**		
						354-400		
18 yrs					**406.5**			
21 yrs			**400.0**					

Tibia

	Stloukal& Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant &Ubelaker	Gindhart	Hoffman	Maresh
3 mths	**70.8**		**70.1**	**69.3**	**71.6**	**84.9**	**75**	**81.4**
	66-76		66-81.5	63-76	60-94	67-103	64-90	75-89
6 mths	**88.8**					**98.2**	**86**	**90**
	84-93					92-105	74-99	82-98
1 yr	**99.2**		**99.0**	**96.9**	**104.8**	**118.3**	**108**	**109.4**
	93-105		82-122	82-111	81-132	111-125	94-120	103-117
1.5 yrs	**111.4**	**127.0**	**125.4**			**135.4**	**124**	**125.1**
	102-120		109-141			127-142	112-137	117-133
2 yrs	**121.1**	**128.0**	**128.8**	**120.6**	**138.6**	**149.6**	**137**	**139.2**
	109-131	127-129	111-143	115-126	125-151	142-158	125-151	130-149
3 yrs	**142.2**	**136.5**	**141.7**	**138.2**	**153.8**	**173.6**	**162**	**162.3**
	127-156	132-141	120-158	130-147	127-184	163-183	146-180	151-173
4 yrs	**151.9**	**156.3**	**156.9**	**154.3**	**170.5**	**193.8**	**181**	**181.8**
	136-171	152-159	136-177	146-162	165-176	182-205	164-204	169-194
5 yrs	**164.1**	**182.0**	**175.8**	**178.4**	**190.8**	**212.8**	**201**	**200.7**
	146-184	164-209	153-184	174-183	181-202	201-226	180-227	184-216
6 yrs	**177.1**	**205.6**	**196.0**		**201.6**	**232.1**	**218**	**218.2**
	158-201	181-223	179-217		191-222	216-246	194-248	201-235
7 yrs	**188.9**	**213.0**	**220.0**		**221.4**	**250.4**	**235**	**235.2**
	168-216				212-230	233-267	207-266	216-254
8 yrs	**202.0**	194-242	193-244		**242.5**	**269.4**	**252**	**267.5**
	180-227				227-258	250-291	220-285	236-275
9 yrs	**213.6**	**236.2**	**240.4**			**290.4**	**268**	**267.1**
	191-235					269-312	236-302	252-292
10 yrs	**224.3**	217-257	210-271		**272.3**	**306.8**	**284**	**284.6**
	202-246				262-285	287-328	248-324	258-313
11 yrs	**235.1**	**268.0**	**233.0**		**285.0**	**323.0**	**299**	**300.3**
	212-259					303-343	258-340	273-332
12 yrs	**244.4**	**263.0**	**288.5**		**287.5**	**336.6**	**320**	**317.1**
	218-268	256-272	273-304		279-296	316-356	278-360	290-349
13 yrs	**256.1**	**292.0**	**266.7**		**299.0**	**352.3**		
	227-283	270-304	234-295			326-386		
14 yrs	**269.8**	**291.3**	**300.9**			**362.5**		
	235-301	253-330	275-327			333-400		
15 yrs	**288.0**	**332.0**	**310.0**		**306.5**	**372.3**		
	257-310		299-316		294-319	337-432		
16 yrs			**308.5**			**384.4**		
			301-316			346-431		
17 yrs		**372.0**	**365.0**			**393.1**		
						350-439		
18 yrs					**334.5**	**385.6**		
						336-428		
21 yrs			**333.5**					
			331-336					

Fibula

	Stloukal & Hanáková	Sundick: Altenerding	Sundick: Ind.Knoll	Johnston	Merchant & Ubelaker	Hoffman	Maresh
3 mths	**66.3**		**67.4**	**65.4**	**68.9**	**72**	**77.9**
	62-72		64-77	60-71	60-88	60-76	72-86
6 mths	**83.7**	**79.0**				**82**	**86.1**
	78-88					70-94	77-94
1 yr	**96.2**		**94.8**	**92.4**	**103.0**	**104**	**106.1**
	90-100		80-116	79-106	75-122	92-116	98-115
1.5 yrs	**107.2**		**119.8**			**122**	**122.6**
	102-113		107-135			109-136	113-131
2 yrs	**119.3**		**125.7**	**113.8**	**133.2**	**134**	**137.1**
	115-125		105-139	106-121	112-143	122-148	127-146
3 yrs	**139.5**		**136.8**	**134.2**	**152.3**	**156**	**160.1**
	133-147		121-156	124-145	124-182	140-174	149-172
4 yrs	**151.1**	**148.7**	**155.3**	**144.7**	**168.5**	**180**	**180.7**
	143-161	143-154	131-175	133-156	163-174	160-200	167-193
5 yrs	**166.6**	**168.0**	**169.3**	**171.7**	**185.8**	**200**	**199.5**
	158-177		145-177.5	167-176	178-193.5	176-220	184-213
6 yrs	**178.3**	**198.3**	**189.0**		**194.4**	**215**	**216.8**
	165-194	175-216	172-210		188-201	190-240	199-233
7 yrs	**190.8**	**208.0**	**206.6**		**216.9**	**230**	**233.2**
	173-211				209-227	205-262	215-251
8 yrs	**203.8**		183-219		**246.0**	**250**	**249.9**
	185-227					220-280	229-270
9 yrs	**213.6**	**224.8**	**230.8**			**265**	**264.7**
	197-234					230-300	243-287
10 yrs	**222.9**	208-245	206-258		**264.0**	**280**	**280.4**
	205-245				255-276	245-320	257-306
11 yrs	**231.7**				**280.0**	**300**	**294.7**
	217-250					256-340	271-325
12 yrs	**237.3**	**253.0**	**289.8**		**285.0**	**314**	**310.6**
	224-253	248-259	287-293		273-292	270-353	283-342
13 yrs	**249.2**	**278.8**	**255.7**		**291.5**		
	233-265	260-295	225-285				
14 yrs	**257.7**	**292.5**	**285.4**				
	238-275	258-332	258-304				
15 yrs	**282.3**		**297.4**		**299.0**		
	251-302		287-309		287-310		
16 yrs			**294.0**		**332.5**		
			290-298				
17 yrs		**363.0**	**344.0**				
18 yrs					**330.0**		
21 yrs			**313.0**				

Appendix 4: Comparative table of the age span of bone formation / epiphyseal fusion

Bone	Location	♀ Start of fusion/ appearance /	♀ End of fusion / appearance	♀ Age	♂ Start of fusion/ appearance	♂ End of fusion / appearance	♂ Age	References
Skull								
Pars squama	Process of Kerckring (posterior margin of foramen magnum)	4-5 fetal months	Before birth		4-5 fetal months	Before birth		Scheuer and Black 2004:71
Pars squama	Supra-occipital not fused to interparietal squama			**≤ 5 fetal months**			**≤ 5 fetal months**	**Schaefer, Black and Scheuer 2009**
Pars squama	Supra-occipital and interparietal parts of squama fuse centrally at the sutura mendosa		5 fetal months			5 fetal months		Scheuer and Black 2004:79
Pars squama	Supra-occipital fused to interparietal squama			**≥ 5 fetal months**			**≥ 5 fetal months**	**Schaefer, Black and Scheuer 2009**
Pars basilaris	Development of lateral angle		7 prenatal months			7 fetal months		Scheuer and Black 2004:79
Pars basilaris	Sagittal length > width			less than 28 fetal weeks			less than 28 fetal weeks	Scheuer and Black 2004:75
Pars basilaris	Max. length < width			> 5 months			> 5 months	Scheuer and Black 2004:75
Occipital	Length pars basilaris = length pars lateralis (approximately)			less than 7 months in utero			less than 7 months in utero	Scheuer and Black 2004:75
Occipital	Pars lateralis longer than pars basilaris		8th prenatal months			8th prenatal months		Scheuer and Black 2004:79
Occipital	Represented by pars basilaris, 2 partes laterales and pars squama			Birth			Birth	Scheuer and Black 2004:79
Occipital	Superior median fissure open			**≤ 11 months**			**≤ 11 months**	**Schaefer, Black and Scheuer 2009**
Occipital	Superior median fissure fused			**≥ 5 months**			**≥ 5 months**	**Schaefer, Black and Scheuer 2009**
Occipital	Sutura mendosa open			**≤ 1.5 years**			**≤ 1.5 years**	**Schaefer, Black and Scheuer 2009**
Occipital	Lateral sections of sutura mendosa	4 months	End of first year of life		4 months	End of first year of life		Scheuer and Black 2004:75, can persist until the age of 3 or 4 years (Fazekas and Kósa 1978)
Occipital	Sutura mendosa fused			**≥ 5 months**			**≥ 5 months**	**Schaefer, Black and Scheuer 2009**
Occipital	Jugular process develops on pars lateralis	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:79
Occipital	Vascular and neural markings become apparent	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:79
Occipital	Partes laterales not fused to squama			**≤ 4 years**			**≤ 4 years**	**Schaefer, Black and Scheuer 2009**
Occipital	Fusion of partes laterales to squama	1 year	3 years		1 year	3 years		Scheuer and Black 2004:76
Occipital	Partes laterales fused to squama			**≥ 1 year**			**≥ 1 year**	**Schaefer, Black and Scheuer 2009**
Occipital	Closure of fissure between partes laterales and squama			until end of sixth year			until end of sixth year	Ferembach 1980 (WEA)
Occipital	Hypoglossal canal (part laterales) open			**≤ 4 years**			**≤ 4 years**	**Schaefer, Black and Scheuer 2009**
Occipital	Hypoglossal canal complete excluding pars basilaris	2 years	4 years		2 years	4 years		Scheuer and Black 2004:79
Occipital	Hypoglossal canal (part laterales) fused			**≥ 1.5 years**			**≥ 1.5 years**	**Schaefer, Black and Scheuer 2009**
Occipital	Partes laterales not fused to pars basilaris			**≤ 7 years**			**≤ 7 years**	**Schaefer, Black and Scheuer 2009**
Occipital	Fusion of pars basilaris and partes laterales	5 years	7 years		5 years	7 years		Scheuer and Black 2004:76, but can start as early as 3-4 years (Tillmann and Lorenz 1978)
				end of third year			end of third year	Ferembach 1980 (WEA)
Occipital	Partes laterales fused to pars basilaris			**≥ 3 years**			**≥ 3 years**	**Schaefer, Black and Scheuer 2009**
Occipital	No spheno-occipital fusion or partial fusion			< 17 years			< 19 years	Sahni et al. 1998
				< 20 years			< 20 years	Redfield 1970
				≤ 13 years			≤ 15 years	Powell and Brodie 1963

Occipital	Fusion of spheno-occipital synchondrosis	**11 years**	**16 years**		**13 years**	**18 years**		**Scheuer and Black 2004:79**
		11 years	14 years		13 years	16 years		Powell and Brodie 1963
					19.5 years	25.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		17 years	22 years		17 years	22 years		Acsádi and Nemeskéri 1970:111
Occipital	Spheno-occipital fusion complete			≥ 13 years			≥ 15 years	Sahni et al. 1998
				≥ 8 years			≥ 13 years	Powell and Brodie 1963
Occipital	Jugular growth plate unfused			<22 years			<22 years	Maat and Mastwijk 1995:163, also in Scheuer & Black and BABAO/IFA guidelines
				≤ 40 years			≤ 40 years	Hershkovitz et al. 1997
Occipital	Unilateral fusion of jugular growth plate	22 years	34 years		22 years	34 years		Maat and Mastwijk 1995:163, also in Scheuer & Black and BABAO/IFA guidelines
Occipital	Bilateral fusion of jugular growth plate			>34 years			>36 years	Maat and Mastwijk 1995:163, also in Scheuer & Black and BABAO/IFA guidelines
Occipital	Closure of jugular growth plate	**22 years**	**34 years**		**22 years**	**34 years**		**Scheuer and Black 2004:79**
Temporal	Bone usually represented by 2 parts: petromastoid and squamotympanic			Birth			Birth	Scheuer and Black 2004:94
Temporal	Petromastoid not fused to squamotympanic			**≤ 12 months**			**≤ 12 months**	**Schaefer, Black and Scheuer 2009**
Temporal	Fusion of petromastoid and squamotympanic parts	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:94
Temporal	Petromastoid fused to squamotympanic			**≥ 9 fetal months**			**≥ 9 fetal months**	**Schaefer, Black and Scheuer 2009**
Temporal	Anterior and posterior tympanic tubercles commence growth	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:94
Temporal	Tympanic ring not fused to temporal squamous			**≤ 1 month**			**≤ 1 month**	**Schaefer, Black and Scheuer 2009**
Temporal	Tympanic ring fused to temporal squamous			**≥ 9 fetal months**			**≥ 9 fetal months**	**Schaefer, Black and Scheuer 2009**
Temporal	Growth of tympanic plate and formation of foramen of Huschke	1 year	5 years		1 year	5 years		Scheuer and Black 2004:94
Temporal	Presence of foramen of Huschke			> 10 months			> 10 months	Humphrey and Scheuer 2006
Temporal	Closed foramen of Huschke			> 30 months			> 30 months	Humphrey and Scheuer 2006
Temporal	Formation of mastoid process	1 year	5 years		1 year	5 years		Scheuer and Black 2004:94
Sphenoid	Lesser wings not fused to body			**≤ 1 month**			**≤ 1 month**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Lesser wings fused to body		5 fetal months			5 fetal months		Scheuer and Black 2004:102
				≥ 5 fetal months			**≥ 5 fetal months**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Pterygoid plates fused to greater wings		8 fetal months			8 fetal months		Scheuer and Black 2004:102
Sphenoid	Presphenoid not fused to postsphenoid			**≤ 2 months**			**≤ 2 months**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Pre- and postsphenoid parts of body usually fused together		8 fetal months			8 fetal months		Scheuer and Black 2004:102
Sphenoid	Presphenoid fused to postsphenoid			**≥ 8 fetal months**			**≥ 8 fetal months**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Usually represented by two parts: body with lesser wings attached; 2 separate greater wings with attached pterygoid plates			Birth			Birth	Scheuer and Black 2004:102
Sphenoid	Greater wings not fused to sphenoid body			**≤ 12 months**			**≤ 12 months**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Fusion of greater wings to body	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:103
		postnatal	9 months		postnatal	9 months		Ferembach 1980 (WEA)
Sphenoid	Greater wings fused to sphenoid body			**≥ 1 month**			**≥ 1 month**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Foramen ovale not fused			**≤ 6 months**			**≤ 6 months**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Foramen ovale is completed	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:103

Sphenoid	Foraman ovale fused			**≥ 1 month**			**≥ 1 month**	**Schaefer, Black and Scheuer 2009**
Sphenoid	Sinus commences pneumatization	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:103
Sphenoid	Foramen spinosum completed		2 years			2 years		Scheuer and Black 2004:103
Sphenoid	Dorsum sellae ossified		5 years			5 years		Scheuer and Black 2004:103
Sphenoid	Fusion of sphenoidal conchae to ethmoid	4 year	puberty		4 year	puberty		Scheuer and Black 2004:103
Parietal	Single bone with prominent eminence, sagittal fontanelle usually obliterated			Birth			Birth	Scheuer and Black 2004:107
Frontal	Represented by right and left halves			Birth			Birth	Scheuer and Black 2004:111
Frontal	Anteroposterior longer than mediolateral length		5 fetal months			5 fetal months		Scheuer and Black 2004:111
Frontal	2 halves of frontal bones not fused			**≤ 2 years**			**≤ 2 years**	**Schaefer, Black and Scheuer 2009**
Frontal	Anterior fontanelle closure	1 year	2 years		1 year	2 years		Scheuer and Black 2004:111
		postnatal	2 years		postnatal	2 years		Ferembach 1980 (WEA)
Frontal	2 halves of frontal bones fused			**≥ 9 months**			**≥ 9 months**	**Schaefer, Black and Scheuer 2009**
Frontal	Metopic suture open (generally)			**≤ 4 years**			**≤ 4 years**	**Schaefer, Black and Scheuer 2009**
Frontal	Closure of frontal/metopic suture	postnatal	2 years		postnatal	2 years		Ferembach 1980 (WEA)
		1 year	4 years		1 year	4 years		Scheuer and Black 2004:111
Frontal	Metopic suture obliterated (generally)			**≥ 2 years**			**≥ 2 years**	**Schaefer, Black and Scheuer 2009**
Nasal bone	Morphology similar to adult except length to width proportion different, borders are smooth vascular foramen is in lower half of the bone			Birth			Birth	Scheuer and Black 2004:113
Nasal bone	Nasal spine development+ superior border becomes serrated			about 3 years			about 3 years	Scheuer and Black 2004:113
Nasal bone	Adoption of adult morphology and size			Puberty			Puberty	Scheuer and Black 2004:113
Ethmoid	Represented by 2 labyrinths joined by cartilage			Birth			Birth	Scheuer and Black 2004:117
Ethmoid	Cribriform plate and crista galli ossify and fuse with labyrinths	1 year	2 years		1 year	2 years		Scheuer and Black 2004:117
Ethmoid	Ossified perpendicular plate reaches vomer and "sphenoidal tail" usually visible posteriorly	3 years	10 years		3 years	10 years		Scheuer and Black 2004:117
Ethmoid	Progressive expansion of ossification into nasal septum	10 years	puberty		10 years	puberty		Scheuer and Black 2004:117
Ethmoid	Fusion of ethmoid and vomer	20 years	30 years		20 years	30 years		Scheuer and Black 2004:117
Inferior nasal concha	Adult morphology except more wrinkled with lacrimal, maxillary and ethmoid processes less well developed			Birth			Birth	Scheuer and Black 2004:118
Inferior nasal concha	Frequently fuses with maxilla but timing very variable			Postnatal			Postnatal	Scheuer and Black 2004:118
Lacrimal	Long slim bone with narrow section posterior to crest			Birth			Birth	Scheuer and Black 2004:119
Lacrimal	Assumes adult morphology	2 years	3 years		2 years	3 years		Scheuer and Black 2004:119
Vomer	Boat-shaped bone composed of 2 laminae			Birth			Birth	Scheuer and Black 2004:121
Vomer	Fusion of perpendicular plate of ethmoid to vomerine groove	3 years	10 years		3 years	10 years		Scheuer and Black 2004:121
Vomer	Assumes adult size and proportions	10 years	puberty		10 years	puberty		Scheuer and Black 2004:121
Vomer	Fusion with perpendicular plate of ethmoid	20 years	30 years		20 years	30 years		Scheuer and Black 2004:121
Zygomatic	Slender triradiate bone with notched inferior border			Birth			Birth	Scheuer and Black 2004:123

Zygomatic	Adoption of adult proportions with serrated frontal and temporal processes	2 years	3 years		2 years	3 years		Scheuer and Black 2004:123
Zygomatic	Malar tubercle may be obvious in males			Puberty			Puberty	Scheuer and Black 2004:123
Maxilla	Formation of crypts for deciduous dentition			11 prenatal weeks			11 prenatal weeks	Scheuer and Black 2004:131
Maxilla	Deciduous tooth germs start to form	14 fetal weeks	16 fetal weeks		14 fetal weeks	16 fetal weeks		Scheuer and Black 2004:131
Maxilla	All deciduous crypts completed	17 fetal weeks	18 fetal weeks		17 fetal weeks	18 fetal weeks		Scheuer and Black 2004:131
Maxilla	Main parts of bone present, sinus rudimentary, crowns of deciduous teeth in crypts, calcificaton of first permanent molar commenced			Birth			Birth	Scheuer and Black 2004:131
Palatine	Has adopted adult morphology but not proportions			Midfetal life			Midfetal life	Scheuer and Black 2004:134
Palatine	Horizontal and perpendicular plates are about equal in width and height, orbital process does not contain air cells			Birth			Birth	Scheuer and Black 2004:135
Palatine	Perpendicular plate starts to increase in height, pneumatization may commence in orbital process	3 years			3 years			Scheuer and Black 2004:135
Palatine	Assumes adult morphology and proportions			Puberty			Puberty	Scheuer and Black 2004:135
Mandible	Deciduous tooth germs start to form	14 fetal weeks	16 fetal weeks		14 fetal weeks	16 fetal weeks		Scheuer and Black 2004:141
Mandible	Consists of separate right and left halves			Birth			Birth	Scheuer and Black 2004:141
Mandible	Mandibular symphysis open			**≤ 8 months**			**≤ 8 months**	**Schaefer, Black and Scheuer 2009**
Mandible	Fusion of mandibular symphysis			~ 8 months			~ 8 months	Nyström and Ranta 2003
		postnatal	1 year		postnatal	1 year		Ferembach 1980 (WEA)
		postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:141
Mandible	Mandibular symphysis fused			**≥ 3 months**			**≥ 3 months**	**Schaefer, Black and Scheuer 2009**
Hyoid	Ossification centres may be present in the upper part of the body and ventral ends of greater horns			Birth			Birth	Scheuer and Black 2004:144
Hyoid	Body usually completely ossified	postnatal	2 years		postnatal	2 years		Scheuer and Black 2004:144
Hyoid	Body and most of greater horns ossified			Puberty			Puberty	Scheuer and Black 2004:144
Larynx	Adult morphology but larynx position high in the neck			Birth			Birth	Scheuer and Black 2004:148
Larynx	Larynx descends to childhood position	postnatal	3 years		postnatal	3 years		Scheuer and Black 2004:148
Larynx	Larynx adopts adult position; sexual dimorphism begins			Puberty			Puberty	Scheuer and Black 2004:148
Larynx	Calcification and ossification may begin in thyroid and cricoid cartilages			End of second decade			End of second decade	Scheuer and Black 2004:148
Spine								
Atlas (C1)	2 parts: 2 lateral masses			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.12)
Atlas (C1)	3 parts: 2 lateral masses, anterior arch		2 years			2 years		Scheuer and Black 2004:225 (Fig.6.12)
Atlas (C1)	2 parts: Posterior and anterior arches	4 years	6 years		4 years	6 years		Scheuer and Black 2004:225 (Fig.6.12)
Atlas (C1)	1 part: fusion of arches			6+ years			6+ years	Scheuer and Black 2004:225 (Fig.6.12)
Atlas (C1)	Neural arches not fused			**≤ 5 years**			**≤ 5 years**	**Schaefer, Black and Scheuer 2009**
Atlas (C1)	Neural arches fused			**≥ 4 years**			**≥ 4 years**	**Schaefer, Black and Scheuer 2009**
Atlas (C1)	Neural arch not fused to anterior bar			**≤ 5 years**				**Schaefer, Black and Scheuer 2009**
Atlas (C1)	Neural arch fused to anterior bar			**≥ 4 years**			**≥ 4 years**	**Schaefer, Black and Scheuer 2009**

Axis (C2)	5 parts: 2 neural arches, centrum, 2 dental centres			Late fetal			Late fetal	Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	4 parts: 2 half neural arches, centrum, dens			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	Neural arches not fused			**≤ 4 years**			**≤ 4 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	4 parts: neural arch, centrum, dens, ossiculum terminale		3 years			3 years		Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	Neural arches fused			**≥ 3 years**			**≥ 3 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	Dens not fused to neural arch			**≤ 4 years**			**≤ 4 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	3 parts: dentoneural, centrum, ossiculum terminale	3 years	4 years		3 years	4 years		Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	Dens fused to neural arch			**≥ 3 years**			**≥ 3 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	Centrum not fused to neural arch			**≤ 6 years**			**≤ 6 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	2 parts: dentoneurocentral fusion, ossiculum terminale		6 years			6 years		Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	Centrum fused to neural arch			**≥ 4 years**			**≥ 4 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	Ossiculum terminale of dens not fused			**≤ 13 years**			**≤ 13 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	1 part: fusion of ossiculum terminale		12 years			12 years		Scheuer and Black 2004:225 (Fig.6.15)
Axis (C2)	Ossiculum terminale of dens fused			**≥ 11 years**			**≥ 11 years**	**Schaefer, Black and Scheuer 2009**
Axis (C2)	1 part: epiphyses appear and fusion completed			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.15)
C3-C7	3 parts: 2 half neural arches, centrum			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.22)
C3-C7	Neural arches not fused			**≤ 2 years**			**≤ 2 years**	**Schaefer, Black and Scheuer 2009**
C3-C7	2 parts: neural arch, centrum		2 years			2 years		Scheuer and Black 2004:225 (Fig.6.22)
C3-C7	Neural arches fused			**≥ 6 months**			**≥ 6 months**	**Schaefer, Black and Scheuer 2009**
C3-C7	1 part: neurocentral fusion		4 years			4 years		Scheuer and Black 2004:225 (Fig.6.22)
C3-C7	Annular rings not fused			**≤ 21 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
C3-C7	Annular epiphyseal union commences	17 years	19 years					Buikstra et al 1984
C3-C7	Fusion of annular rings			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.22)
		14 years	**23 years**		**14 years**	**23 years**		**Schaefer, Black and Scheuer 2009**
							24-25 years	McKern and Stewart 1957
C3-C7	Annular rings completely fused			by 25 years				Buikstra et al 1984
				≥ 18 years			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
T1-T12	3 parts: 2 half neural arches, centrum			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.22)
T1-T12	Neural arches not fused			**≤ 2 years**			**≤ 2 years**	**Schaefer, Black and Scheuer 2009**
T1-T12	2 parts: neural arch, centrum		2 years			2 years		Scheuer and Black 2004:225 (Fig.6.22)
T1-T12	Neural arches fused			**≥ 6 months**			**≥ 6 months**	**Schaefer, Black and Scheuer 2009**
T1-T12	1 part: neurocentral fusion		6 years			6 years		Scheuer and Black 2004:225 (Fig.6.22)
T1-T12	Annular rings not fused			<14 years			<16 years 4 months	Albert and Maples 1995
				≤ 21 years			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
T1-T12	Fusion of annular rings			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.22)
		14 years	**23 years**		**14 years**	**23 years**		**Schaefer, Black and Scheuer 2009**
T1-T12	Complete ring epiphyseal union in any vertebra	18 years			18 years 9 months			Albert and Maples 1995
T1-T12	Annular rings completely fused			**≥ 18 years**			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
		25 years			24 years 2 months			Albert and Maples 1995
							24-25 years	McKern and Stewart 1957
L1-L4	3 parts: 2 half neural arches, centrum			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.22)

L1-L5	Neural arches not fused			**≤ 2 years**			**≤ 2 years**	**Schaefer, Black and Scheuer 2009**
L1-L4	2 parts: neural arch, centrum	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:225 (Fig.6.22)
L1-L5	Neural arches fused			**≥ 6 months**			**≥ 6 months**	**Schaefer, Black and Scheuer 2009**
L1-L4	1 part: neurocentral fusion		4 years			4 years		Scheuer and Black 2004:225 (Fig.6.22)
L1-L4	Epiphyses appear and fusion completed			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.22)
L5	3 parts: 2 half neural arches, centrum			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.22)
L5	1 part: neural and then neurocentral fusion		5 years			5 years		Scheuer and Black 2004:225 (Fig.6.22)
L5	Epiphyses appear and fusion completed			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.22)
L1-L5	Annular rings not fused			**≤ 21 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
L5	Fusion of fifth lumbar ring	17 years			18.5 years			Johnston 1961
L1-L5	Fusion of annular rings	**14 years**	**23 years**		**14 years**	**23 years**		**Schaefer, Black and Scheuer 2009**
L1-L5	Complete fusion of vertebral rings						24-25 years	McKern and Stewart 1957
				≥ 18 years			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	21 parts: all primary centra: S1-S3 in 5 parts - 2 half neural arches, centrum, 2 lateral elements. S4-S5 in 3 parts - 2 half neural arches, centrum			Birth			Birth	Scheuer and Black 2004:225 (Fig.6.20)
Sacrum	Lateral element not fused to neural arch			**≤ 5 years**			**≤ 5 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Wing (lateral element+neural arch) not fused to centra			**≤ 6 years**			**≤ 6 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	5 parts: all elements fused apart from synchondroses	2 years	6 years		2 years	6 years		Scheuer and Black 2004:225 (Fig.6.20)
Sacrum	Lateral element fused to neural arch			**≥ 2 years**			**≥ 2 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Wing (lateral element+neural arch) fused to centra			**≥ 2 years**			**≥ 2 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Variable: fusion between lateral elements and union of lower sacral segments	12 years	14 years		12 years	14 years		Scheuer and Black 2004:225 (Fig.6.20)
Sacrum	1 part: epiphyses appear and commence union, lateral and central fusion in caudocranial direction			Puberty			Puberty	Scheuer and Black 2004:225 (Fig.6.20)
Sacrum	Auricular surface not fused			**≤ 20 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Sacro-iliac epiphysis appears	15 years	16 years		15 years		16 years	From Rogers and Cleaves 1935 and Bollow et al. 1997, in Scheuer and Black 2000:213
Sacrum	Fusion of auricular surface	**15 years**	**21 years**		**17 years**	**21 years**		**Schaefer, Black and Scheuer 2009**
		18 years			18.5 years			Johnston 1961
Sacrum	Auricular surface completely fused			by 18+ years			by 18+ years	From Rogers and Cleaves 1935 and Bollow et al. 1997, in Scheuer and Black 2000:213
				≥ 17 years			**≥18 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Spaces between sacral vertebral bodies			>20 years			>20 years	Scheur and Black 2000:213, also in BABAO/IFA guidelines
Sacrum	Incomplete sacral vertebral body fusion, at least 1 unfused or with fusion less than 50%, or a total score <2.5	20 years	34 years		20 years	34 years		Belcastro et al. 2008
Sacrum	If space only between S1 and S2			likely > 27 years			likely > 27 years	Scheur and Black 2000:213, also in BABAO/IFA guidelines
Sacrum	Fusion of S1 epiphyseal ring	15 years			17.5 years			Johnston 1961
Sacrum	S1-S2 bodies not fused			**≤ 27 years**			**≤ 27 years**	**Schaefer, Black and Scheuer 2009**

Sacrum	Fusion of S1-S2 bodies	**14 years**	**30+ years**		**19 years**	**30+ years**		**Schaefer, Black and Scheuer 2009**
				25+ years			25+ years	Scheuer and Black 2004:225 (Fig.6.20)
					17.5 years	might never fuse		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		17 years			18.5 years			Johnston 1961
Sacrum	S1-S2 fusion of less than 50% with complete fusion of S2-S5	20 years	49 years		20 years	49 years		Belcastro et al. 2008
Sacrum	S1-S2 bodies completely fused			**≥ 21 years**			**≥ 25 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	S1-S2 Alae not fused			**≤ 19 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Fusion of S1-S2 alae	**11 years**	**26 years**		**16 years**	**27 years**		**Schaefer, Black and Scheuer 2009**
Sacrum	S1-S2 alae completely fused			**≥ 14 years**			**≥ 19 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	S2-S3 bodies not fused			**≤ 20 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Fusion of S2-S3				17.5 years	24.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		12 years	**26 years**		**16 years**	**28 years**		**Schaefer, Black and Scheuer 2009**
		15 years			17 years			Johnston 1961
Sacrum	S2-S3 bodies completely fused			**≥ 19 years**			**≥ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	S3-S4 bodies not fused			**≤ 20 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Fusion of S3-S4	**12 years**	**26 years**		**16 years**	**28 years**		**Schaefer, Black and Scheuer 2009**
		12 years			16.5 years			Johnston 1961
					17 years	23.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
Sacrum	S3-S4 bodies completely fused			**≥ 19 years**			**≥ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	S4-S5 bodies not fused			**≤ 20 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Fusion of S4-S5	**12 years**	**26 years**		**16 years**	**28 years**		**Schaefer, Black and Scheuer 2009**
		14.5 years			17 years	19 years		Johnston 1961
					17 years	23.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
Sacrum	S4-S5 bodies completely fused			**≥ 19 years**			**≥ 20 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	S2-S5 alae not fused			**≤ 14 years**			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**
Sacrum	Fusion of S2-S5 alae	**10 years**	**19 years**		**16 years**	**21 years**		**Schaefer, Black and Scheuer 2009**
Sacrum	S2-S5 alae completely fused			**≥ 13 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Coccyx	1 part: Co1 develops	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:226 (Fig.6.20)
Coccyx	2 parts: Co1 and 2 present		6 years			6 years		Scheuer and Black 2004:226 (Fig.6.20)
Coccyx	3 parts: Co1-3 present		10 years			10 years		Scheuer and Black 2004:226 (Fig.6.20)
Coccyx	4 parts: all coccygeal centres present			Puberty			Puberty	Scheuer and Black 2004:226 (Fig.6.20)
Coccyx	Variable: variable fusion of primary centres			Post puberty			Post puberty	Scheuer and Black 2004:226 (Fig.6.20)

Thorax								
Sternum	Sternum represented by at least 4 centres of ossification			Birth			Birth	Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Primary centre develops for sternebra 4. Manubrium can be identified in isolation	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Ossification can commence in the xyphoid. All sternebrae can probably be identified in isolation	3 years	6 years		3 years	6 years		Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Fusion of sternebrae 3 and 4	4 years	10 years		4 years	10 years		Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Fusion of sternebra 2 to 3 and 4. Epiphyses appear and commence fusion	11 years	16 years		11 years	16 years		Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Sternebra 1 fuses to rest of mesosternum. Epiphyses continue to fuse	15 years	20 years		15 years	20 years		Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Sternum essentially complete, although lines of fusion between sternebrae may persist until 25 years or older			21+ years			21+ years	Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Fusion of clavicular notch				18.5 years			Johnston 1961
Sternum	First costal notch not fused			**≤ 23 years**			**≤ 23 years**	**Schaefer, Black and Scheuer 2009**
Sternum	Fusion of first costal notch	**18 years**	**25 years**		**18 years**	**25 years**		**Schaefer, Black and Scheuer 2009**
Sternum	First costal notch completely fused			**≥ 21 years**			**≥ 21 years**	**Schaefer, Black and Scheuer 2009**
Sternum	All epiphyseal plaques in costal notches have fused			25+ years			25+ years	Scheuer and Black 2004:238 (Fig.7.5)
Sternum	Xiphoid process commences fusion to mesosternum			40+ years			40+ years	Scheuer and Black 2004:238 (Fig.7.5)
Ribs	All primary ossification centres present			Birth			Birth	Scheuer and Black 2004:244 (Fig.7.13)
Ribs	Epiphyses appear in non-articular region of the tubercle	12 years	14 years		12 years	14 years		Scheuer and Black 2004:244 (Fig.7.13)
Ribs	Epiphyses appear for articular region of the tubercle			18 years			18 years	Scheuer and Black 2004:244 (Fig.7.13)
Ribs	Fusion of epiphysis of nonarticular tubercle	11 years	19 years		11 years	19 years		Rios and Cardoso 2009
Ribs	Fusion of epiphysis of articular tubercle	11 years	20 years		16 years	20 years		Rios and Cardoso 2009
Ribs	Heads not fused			**≤ 21 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
Ribs	Fusion of heads	17 years	25 years		17 years	25 years		Scheuer and Black 2004:244 (Fig.7.13)
		17 years	**22 years**		**17 years**	**22 years**		**Schaefer, Black and Scheuer 2009**
		15 years	24 years		16 years	22 years		Rios and Cardoso 2009
Ribs	*Heads completely fused*			***≥ 21 years***			***≥ 21 years***	***Schaefer, Black and Scheuer 2009***
Ribs	Ossification may be present in the costal cartilages			21+ years			21+ years	Scheuer and Black 2004:244 (Fig.7.13)
Ribs	Ribs are fully adult			25+ years			25+ years	Scheuer and Black 2004:244 (Fig.7.13)
Shoulders								
Clavicle	Clavicle adopts adult morphology			11 fetal weeks			11 fetal weeks	Scheuer and Black 2004:252 (Fig.8.2)
Clavicle	Clavicle is represented by shaft only and is essentially adult in its morphology			Birth			Birth	Scheuer and Black 2004:252 (Fig.8.2)
Clavicle	Medial epiphyseal flake forms	11 years	14 years		12 years	14 years		Scheuer and Black 2004:252 (Fig.8.2)

Clavicle	Medial epiphysis not fused			likely >18 years			likely >18 years	Scheur and Black 2000:251, also in BABAO/IFA guidelines
				≤ 27 years			≤ 25 years	Flecker 1942
				≤ 23 years			≤ 25 years	Webb and Suchey 1985:462
				23 years or less			25 years or less	Bass 1995:136, after Owings (1981:43) and Webb & Suchey (1985)
				19 years of less				From Webb and Suchey 1985 in Loth and Iscan 1989
		18 years	21 years					From Webb and Suchey 1985 in Loth and Iscan 1989
				≤ 23 years			**≤ 23 years**	**Schaefer, Black and Scheuer 2009**
Clavicle	Appearance of medial epiphysis/start of fusion	16 years	21 years		16 years	21 years		Scheuer and Black 2004:252 (Fig.8.2), also in BABAO/IFA guidelines, has been reported as early as 11 years
					18 years	25 years		McKern and Stewart 1957 (in Loth and Iscan 1989)
		16 years	20 years		16 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		17 years	21 years		18 years	22 years		Ubelaker 1984:53
Clavicle	Epiphysis at medial end covers most of the articular surface / Terminal union	24 years	29 years		24 years	29 years		Scheur and Black 2000:251, also in BABAO/IFA guidelines
					25 years	30 years		McKern and Stewart 1957 (in Loth and Iscan 1989)
		22 years	28 years					From Webb and Suchey 1985 in Loth and Iscan 1989
		21 years	25 years		21 years	25 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Clavicle	Fusion of medial epiphysis	**17 years**	**30 years**		**17 years**	**30 years**		**Schaefer, Black and Scheuer 2009**
		16 years	33 years		17 years	30 years		Webb and Suchey 1985:462
					18.5 years	30.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		16 years	23 years		17 years	25 years		Mays 1998, from Webb and Suchey 1985
		18 years	30 years		18 years	30 years		Brothwell 1965:60
		21 years	23 years		22 years	24 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					25 years	28 years		Krogman 1939 from Todd 1930
		21 years	23 years		22 years	24 years		Nemeskéri et al. 1960
		16 years	33 years		17 years	30 years		Bass 1995:136, after Owings (1981:43) and Webb & Suchey (1985)
		17 years	27 years					From Webb and Suchey 1985 in Loth and Iscan 1989
Clavicle	Medial epiphysis completely fused						31 years	McKern and Stewart 1957 (in Loth and Iscan 1989)
				by 28 years			by 28 years	Webb and Suchey 1985 (cited in Cox 2000:66)
				20 years or more			21 years or more	Bass 1995:136, after Owings (1981:43) and Webb & Suchey (1985)
				≥ 20 years			≥ 21 years	Webb and Suchey 1985:462
				≥ 21 years			**≥ 21 years**	**Schaefer, Black and Scheuer 2009**
				29+ years (by 30 years), unlikely before 22 years			29+ years (by 30 years), unlikely before 22 years	Scheuer and Black 2004:252 (Fig.8.2), 2000:251, also in BABAO/IFA guidelines
Clavicle	Fusion of lateral epiphysis				19 years	20 years		Krogman 1939 from Todd 1930
Clavicle	Lateral epiphysis may form and fuse	19 years	20 years		19 years	20 years		Scheuer and Black 2004:252 (Fig.8.2)

Scapula	Majority of main body of scapula ossified but acromion, coracoid, medial border, inferior angle and glenoidal mass are still cartilaginous			Birth			Birth	Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Coracoid commences ossification	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	The coracoid is recognizable as a separate ossification centre			3 years			3 years	Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Subcoracoid centre appears	8 years	10 years		8 years	10 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Coaracoid and subcoracoid not fused			≤ 16 years			≤ 19 years	Flecker 1942
				≤ 16 years			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Coracoid and subcoracoid commence fusion to body of the scapula	13 years	16 years		13 years	13 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Epiphyses for angle and apex of coracoid appear	13 years	16 years		13 years	13 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Fusion of coracoid process	15 years	17 years		15 years	17 years		Scheuer and Black 2004:262 (Fig.8.15)
		14 years	**18 years**		**15 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		16 years	22 years		16 years	22 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		17 years	22 years		17 years	22 years		Brothwell 1965:60
		16 years	22 years		16 years	22 years		Nemeskéri et al. 1960
		15 years	18 years		15 years	18 years		Bass 1995:119
Scapula	Coracoid and subcoracoid completely fused		20 years			20 years		Scheuer and Black 2004:262 (Fig.8.15)
				≥ 16 years			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Glenoid cavity not fused			**≤ 16 years**			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Epiphyses appear for glenoid rim	13 years	16 years		13 years	13 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Fusion of glenoid cavity	**14 years**	**18 years**		**15 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		16 years	22 years		16 years	22 years		Nemeskéri et al. 1960
		17 years	22 years		17 years	22 years		Brothwell 1965:60
		15 years	18 years		15 years	18 years		Bass 1995:119
		16 years	22 years		16 years	22 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		14.5 years	15 years		17 years	19 years		Johnston 1961
Scapula	Glenoid cavity completely fused	17 years	18 years		17 years	18 years		Scheuer and Black 2004:262 (Fig.8.15)
				≥ 16 years			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Acromial epiphysis appears	13 years	16 years		13 years	13 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Acromion not fused			≤ 16 years			≤ 19 years	Flecker 1942
				≤ 18 years			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**

Scapula	Fusion of acromion	**15 years**	**17 years**		**17 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
					14.5 years	21.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		17 years	22 years		17 years	22 years		Brothwell 1965:60
		16 years	22 years		16 years	22 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16.5 years	18 years		18.5 years	19.5 years		Johnston 1961
					18 years	19 years		Krogman 1939 from Todd 1930
		16 years	22 years		16 years	22 years		Nemeskéri et al. 1960
		13 years	20 years		14 years	22 years		Ubelaker 1984:53
		16 years	22 years		16 years	22 years		Bass 1995:119
Scapula	Acromion completely fused		20 years			20 years		Scheuer and Black 2004:262 (Fig.8.15)
				≥ 15 years			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Inferior angle not fused			**≤ 21 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Epiphysis for inferior angle appears	15 years	17 years		15 years	17 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Fusion of inferior angle	**17 years**	**22 years**		**17 years**	**22 years**		**Schaefer, Black and Scheuer 2009**
		19 years	21 years		20 years	24 years		Nemeskéri et al. 1960
		17 years	22 years		17 years	22 years		Brothwell 1965:60
		19 years	21 years		20 years	24 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		17 years	22 years		17 years	22 years		Bass 1995:119
					20 years	21 years		Krogman 1939 from Todd 1930
Scapula	Inferior angle completely fused		23 years			23 years		Scheuer and Black 2004:262 (Fig.8.15)
				≥ 17 years			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Epiphyseal islands appear along medial border	15 years	17 years		15 years	17 years		Scheuer and Black 2004:262 (Fig.8.15)
Scapula	Medial border not fused			**≤ 21 years**			**≤ 21 years**	**Schaefer, Black and Scheuer 2009**
Scapula	Fusion of medial (vertebral) border	**18 years**	**22 years**		**18 years**	**22 years**		**Schaefer, Black and Scheuer 2009**
					20 years	21 years		Krogman 1939 from Todd 1930
		19 years	21 years		20 years	24 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		17 years	22 years		17 years	22 years		Brothwell 1965:60
		19 years	21 years		19 years	21 years		Nemeskéri et al. 1960
		17 years	23 years		17 years	23 years		Bass 1995:119
Scapula	Medial border completely fused		23 years			23 years		Scheuer and Black 2004:262 (Fig.8.15)
				≥ 18 years			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
Upper Limbs								
Humerus	Usually represented by shaft only			Birth			Birth	Scheuer and Black 2004:276 (Fig.9.8)
Humerus	Secondary centre for head appears	2 months	6 months		2 months	6 months		Scheuer and Black 2004:276 (Fig.9.8)
Humerus	Appearance of ossification centre of proximal epiphysis			1 year			1 year	Acsádi and Nemeskéri 1970, from Vallois 1960
Humerus	Appearance of ossification centre of distal epiphysis	1 year	2 years		1 year	2 years		Acsádi and Nemeskéri 1970, from Vallois 1960

Humerus	Secondary centre for greater tubercle appears; secondary centre for capitulum appears	1 year	2 years		1 year	2 years		Scheuer and Black 2004:276 (Fig.9.8)
Humerus	Secondary centre for medial epicondyle appears and possibly that for lesser tubercle			4+ years			4+ years	Scheuer and Black 2004:276 (Fig.9.8)
Humerus	Centres for head, greater and lesser tubercles fuse to form composite epiphysis	2 years	6 years		2 years	6 years		Scheuer and Black 2004:277 (Fig.9.8)
Humerus	Greater and lesser tubercles not fused to head			≤ 6 years			≤ 6 years	Flecker 1942
				≤ 6 years			**≤ 6 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Initial union of greater tubercle	2 years	4 years		2 years	4 years		Ubelaker 1984:53
Humerus	Greater and lesser tubercles fused to head			≥ 3 years				Flecker 1942
				≥ 2 years			**≥ 2 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Secondary centre for trochlea appears		8 years			8 years		Scheuer and Black 2004:277 (Fig.9.8)
Humerus	Secondary centre for lateral epicondyle appears			10 years			10 years	Scheuer and Black 2004:277 (Fig.9.8)
Humerus	Distal epiphysis not fused			**≤ 15 years**			**≤ 15 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Initial union of trochlea	9 years	13 years		11 years	15 years		Ubelaker 1984:53
Humerus	Fusion of distal epiphysis	11 years	15 years		12 years	17 years		Scheuer and Black 2004:277 (Fig.9.8)
		11 years	**15 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		9 years	13 years		11 years	16 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		13 years	16 years		14 years	16 years		Mays 1998, from Flecker 1942
				13 years			14 years	Acsádi and Nemeskéri 1970, from Todd 1930
		13 years	14 years				16 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				11.5 years			14 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		10 years	14 years		11 years	17 years		Ubelaker 1984:53
		11.5 years	15.5 years		14 years	16 years		Johnston 1961
		13 years	19 years		13 years	19 years		Brothwell 1965:60
		14 years	17 years		14 years	18 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					14 years	15 years		Krogman 1939 from Todd 1930
		14 years	17 years		14 years	18 years		Nemeskéri et al. 1960
		14 years	15 years		14 years	15 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Humerus	Distal epiphysis completely fused			17-18 years			17-18 years	Bass 1995:154, from McKern and Stewart (1957:44)
				≥ 12 years			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Medial epiphysis not fused			**≤ 15 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**

Humerus	Fusion of medial epiphysis	13 years	15 years		14 years	16 years		Scheuer and Black 2004:277 (Fig.9.8)
		13 years	**15 years**		**16 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		10 years	15 years		11 years	16 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		10 years	16 years		12 years	17 years		Mays 1998, from Flecker 1942
				14 years			15 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			16 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				15 years			17 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		15 years	16 years		17 years	18 years		Johnston 1961
		13 years	19 years		13 years	19 years		Brothwell 1965:60
					15 years	16 years		Krogman 1939 from Todd 1930
		13 years	15 years		15 years	18 years		Ubelaker 1984:53
Humerus	Medial epiphysis completely fused			19 years			19 years	Bass 1995:154, from McKern and Stewart (1957:44)
				≥ 13 years			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Proximal epiphysis unfused			**≤ 17 years**			**≤20 years**	**Schaefer, Black and Scheuer 2009**
Humerus	Fusion of proximal epiphysis	13 years	17 years		16 years	20 years		Scheuer and Black 2004:277 (Fig.9.8)
		14 years	**19 years**		**16 years**	**21 years**		**Schaefer, Black and Scheuer 2009**
		15 years	20 years		16 years	19 years		Mays 1998, from Flecker 1942
		19 years	20 years					Acsádi and Nemeskéri 1970, from Todd 1930
				17 years			20 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				16 years			18.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		16 years			18.5 years			Johnston 1961
		18 years	22 years		20 years	25 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16 years	25 years		16 years	25 years		Brothwell 1965:60
					19.5 years	20.5 years		Krogman 1939 from Todd 1930
					14.5 years	23 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		18 years	22 years		20 years	25 years		Nemeskéri et al. 1960
		14 years	20 years		14 years	21 years		Ubelaker 1984:53
		18 years	22 years		18 years	22 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Humerus	Proximal epiphysis completely fused			**≥ 16 years**			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
				24 years			24 years	Bass 1995:154, from McKern and Stewart (1957:44)
Radius	Represented by shaft only			Birth			Birth	Scheuer and Black 2004:283 (Fig.9.14)
Radius	Secondary centre for distal epiphysis appears	1 year	2 years		1 year	2 years		Scheuer and Black 2004:283 (Fig.9.14)
		1 year	2 years		1 year	2 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Radius	Appearance of ossification centre for proximal epiphysis	4 years	7 years		4 years	7 years		Acsádi and Nemeskéri 1970, from Vallois 1960
				5 years			5 years	Scheuer and Black 2004:283 (Fig.9.14)
Radius	Styloid process forms on distal epiphysis		8 years			8 years		Scheuer and Black 2004:283 (Fig.9.14)
Radius	Proximal epiphysis shows foveal indentation	10 years	11 years		10 years	11 years		Scheuer and Black 2004:283 (Fig.9.14)
Radius	Proximal epiphysis not fused			**≤ 15 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**

		11.5 years	13 years		14 years	17 years		Scheuer and Black 2004:283 (Fig.9.14)
		12 years	**16 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
					14.5 years	19 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
				13 years			15 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			16 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				14 years			17.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		12 years	15.5 years		17.5 years	19 years		Johnston 1961
Radius	Fusion of proximal epiphysis	13 years	19 years		14 years	20 years		Mays 1998, from Flecker 1942
		14 years	17 years		14 years	18 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		13 years	19 years		13 years	19 years		Brothwell 1965:60
					14.5 years	15.5 years		Krogman 1939 from Todd 1930
		14 years	17 years		14 years	18 years		Nemeskéri et al. 1960
		13 years	16 years		14 years	19 years		Ubelaker 1984:53
		15 years	18 years		15 years	18 years		Bass 1995:168, from Greulich and Pyle 1959
		14 years	18 years		14 years	18 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Radius	Proximal epiphysis completely fused			**≥ 13 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Radius	Flake for tuberosity may form as separate centre			Puberty			Puberty	Scheuer and Black 2004:283 (Fig.9.14)
Radius	Distal epiphysis not fused			**≤ 18 years**			**≤ 19 years**	**Schaefer, Black and Scheuer 2009**
		14 years	17 years		16 years	20 years		Scheuer and Black 2004:283 (Fig.9.14)
		14 years	**19 years**		**16 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		15 years	20 years		17 years	23 years		Mays 1998, from Flecker 1942
				18 years			19 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				16 years			18.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		16 years			18.5 years			Johnston 1961
		15 years	23 years		15 years	23 years		Brothwell 1965:60
		16 years	19 years		17 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
Radius	Fusion of distal epiphysis	16 years	21 years		17 years	22 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					17 years	22 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
					18 years	19 years		Krogman 1939 from Todd 1930
		16 years	19 years		17 years	20 years		Nemeskéri et al. 1960
		16 years	19 years		16 years	20 years		Ubelaker 1984:53
		21 years	23 years		21 years	23 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		16 years	17 years		17 years	19 years		Bass 1995:168, from Greulich and Pyle 1959
Radius	Distal epiphysis completely fused			**≥ 15 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**

Ulna	Represented by shaft only			Birth			Birth	Scheuer and Black 2004:290 (Fig.9.19)
Ulna	Appearance of ossification centre for distal epiphysis	5 years	7 years		5 years	7 years		Scheuer and Black 2004:290 (Fig.9.19)
		4 years	6 years		4 years	6 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Ulna	Styloid process forms on distal epiphysis	8 years	10 years		8 years	10 years		Scheuer and Black 2004:290 (Fig.9.19)
Ulna	Appearance of ossification centre for olecranon (proximal epiphysis)	8 years	10 years		8 years	10 years		Scheuer and Black 2004:290 (Fig.9.19)
		10 years	12 years		10 years	12 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Ulna	Proximal epiphysis not fused			**≤ 15 years**			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**
Ulna	Fusion of proximal epiphysis	12 years	14 years		13 years	16 years		Scheuer and Black 2004:290 (Fig.9.19)
		12 years	**15 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		13 years	17 years		13 years	17 years		Mays 1998, from Flecker 1942
				13 years			15 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			16 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				11.5 years			14 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		11.5 years	17 years		14 years	17 years		Johnston 1961
		14 years	17 years		14 years	18 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		13 years	19 years		13 years	19 years		Brothwell 1965:60
					14.5 years	15.5 years		Krogman 1939 from Todd 1930
		14 years	17 years		14 years	18 years		Nemeskéri et al. 1960
		15 years	17 years		15 years	17 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		15 years	18 years				19 years	Bass 1995:174, from McKern and Stewart (1957:47)
Ulna	Proximal epiphysis completely fused			**≥ 12 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
Ulna	Fusion of distal epiphysis			17 years	17 years	20 years		Scheuer and Black 2004:290 (Fig.9.19)
		15 years	**19 years**		**17 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		15 years	22 years		17 years	23 years		Mays 1998, from Flecker 1942
				18 years			18 years	Acsádi and Nemeskéri 1970, from Todd 1930
				17 years			19 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				18 years			18.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		18 years	19 years		18.5 years			Johnston 1961
		15 years	23 years		15 years	23 years		Brothwell 1965:60
		16 years	19 years		17 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16 years	21 years		17 years	22 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					18 years	19 years		Krogman 1939 from Todd 1930
		16 years	19 years		17 years	20 years		Nemeskéri et al. 1960
		16 years	19 years		18 years	20 years		Ubelaker 1984:53
		18 years	20 years		18 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		15 years	16 years		17 years	18 years		Bass 1995:174, from Greulich and Pyle 1959
Ulna	Distal epiphysis not fused			**≤ 18 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**

Ulna	Distal epiphysis completely fused			**≥ 15 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
Hands								
Hands	All 19 primary centres for the long bones of the hand are present, ossification cnetres for capitate and hamate may be present			Birth			Birth	Scheuer and Black 2004:313 (Fig.9.32)
Capitate	Ossification centre appears	2 months	3 months		3 months	4 months		Scheuer and Black 2004:313 (Fig.9.32)
Capitate	Can be identified			3 years			4 years	Scheuer and Black 2004:313 (Fig.9.32)
Hamate	Ossification centre appears	3 months	4 months		4 months	5 months		Scheuer and Black 2004:313 (Fig.9.32)
Hamate	Can be identified			4 years			5 years	Scheuer and Black 2004:313 (Fig.9.32)
Hamate	Hook of hamate appears and fuses to body	10 years	12 years		10 years	12 years		Scheuer and Black 2004:313 (Fig.9.32)
Triquetral	Ossification centre appears	1 year	2 years		1 year	2 years		Scheuer and Black 2004:313 (Fig.9.32)
Triquetral	Can be identified			8 years			10 years	Scheuer and Black 2004:313 (Fig.9.32)
Lunate	Ossification centre appears			3 years			4 years	Scheuer and Black 2004:313 (Fig.9.32)
Lunate	Can be identified	9 years	10 years		9 years	10 years		Scheuer and Black 2004:313 (Fig.9.32)
Trapezium	Ossification centre appears			4 years			5 years	Scheuer and Black 2004:313 (Fig.9.32)
Trapezium	Can be identified	9 years	10 years		9 years	10 years		Scheuer and Black 2004:313 (Fig.9.32)
Trapezoid	Ossification centre appears			5 years			6 years	Scheuer and Black 2004:313 (Fig.9.32)
Trapezoid	Can be identified	9 years	10 years		9 years	10 years		Scheuer and Black 2004:313 (Fig.9.32)
Scaphoid	Ossification centre appears			5 years			6 years	Scheuer and Black 2004:313 (Fig.9.32)
Scaphoid	Can be identified	9.5 years	11 years		9.5 years	11 years		Scheuer and Black 2004:313 (Fig.9.32)
Pisiform	Ossification centre appears			8 years			10 years	Scheuer and Black 2004:313 (Fig.9.32)
Pisiform	Can be identified			12 years			12 years	Scheuer and Black 2004:313 (Fig.9.32)
Sesamoid bones	Sesamoid bones commence ossification	11 years	15 years		13 years	18 years		Scheuer and Black 2004:313 (Fig.9.32)
MC2-5	Epiphyses for heads of MC 2-5 appear	16 months	19 months		22 months	29 months		Scheuer and Black 2004:313 (Fig.9.32)
MC1	Epiphysis for base of MC1 appear			2 years	2 years	3 years		Scheuer and Black 2004:313 (Fig.9.32)
MC3	Styloid process of MC3 develops	10 years	12 years		10 years	12 years		Scheuer and Black 2004:313 (Fig.9.32)
MC1	Fusion of base of MC1	14 years	14.5 years				16.5 years	Scheuer and Black 2004:313 (Fig.9.32)
		13 years	15 years		14 years	19 years		Mays 1998, from Flecker 1942
		14.5 years	15 years		17 years	18 years		Johnston 1961
MC2-5	Fusion of heads of MC2-5	14.5 years	15 years				16.5 years	Scheuer and Black 2004:313 (Fig.9.32)
		14 years	18 years		16 years	20 years		Mays 1998, from Flecker 1942
MC	Epiphyses not fused			**≤ 15 years**			**≤ 17 years**	**Schaefer, Black and Scheuer 2009**
MC	Fusion of epiphyses	14 years	21 years		14 years	21 years		Brothwell 1965:60
		11 years	**16 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
					15.5 years	16.5 years		Krogman 1939 from Todd 1930
		16 years	20 years		16 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
MC	Epiphyses completely fused			**≥ 12 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
1st proximal phalanx	Epiphysis for base of proximal phalanx 1 appear			2 years	2 years	3 years		Scheuer and Black 2004:313 (Fig.9.32)

Proximal phalanges	Fusion of epiphyses	14 years	14.5 years				16.5 years	Scheuer and Black 2004:313 (Fig.9.32)
		13 years	16 years		14 years	19 years		Mays 1998, from Flecker 1942
					15 years	16 years		Krogman 1939 from Todd 1930
Middle phalanges 2-4	Epiphyses for bases of middle phalanges 2-4 appear			19 months			2.5 years	Scheuer and Black 2004:313 (Fig.9.32)
5 middle phalanx	Epiphysis for base of middle phalanx 5 appears			2.5 years			3.5 years	Scheuer and Black 2004:313 (Fig.9.32)
Middle phalanges	Fusion of epiphyses	14 years	14.5 years				16.5 years	Scheuer and Black 2004:313 (Fig.9.32)
					15 years	16 years		Krogman 1939 from Todd 1930
		13 years	16 years		14 years	19 years		Mays 1998, from Flecker 1942
Distal phalanges 3-4	Epiphyses for bases of distal phalanges 3-4 appear			2 years	2 years	3 years		Scheuer and Black 2004:313 (Fig.9.32)
5 distal phalanx	Epiphysis for base of distal phalanx 5 appears			2.5 years			3.5 years	Scheuer and Black 2004:313 (Fig.9.32)
Distal phalanges	Fusion of epiphyses			13.5 years			16 years	Scheuer and Black 2004:313 (Fig.9.32)
		14 years	16 years		14 years	17 years		Mays 1998, from Flecker 1942
					14.5 years	15.5 years		Krogman 1939 from Todd 1930
Phalanges	Epiphyses not fused			***≤ 15 years***			***≤ 17 years***	***Schaefer, Black and Scheuer 2009***
Phalanges	Fusion of epiphyses	**11 years**	**16 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		14 years	21 years		14 years	21 years		Brothwell 1965:60
		16 years	20 years		16 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16 years	20 years		16 years	20 years		Nemeskéri et al. 1960
Phalanges	Epiphyses completely fused			**≥ 12 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
Pelvis								
Innominate	All 3 primary bony components are represented			Birth			Birth	Scheuer and Black 2004:339 (Fig.10.22)
Ilium	Ilium shows a prominence on its acetabular extremity formed by the development of the iliopectineal line		6 months			6 months		Scheuer and Black 2004:339 (Fig.10.22)
Ilium	Anterior border of the ilium has bent forwards in the vertical plane		2 years			2 years		Scheuer and Black 2004:339 (Fig.10.22)
Ilium	Non-articular acetabular area is well defined on the ilium		4-5 years			4-5 years		Scheuer and Black 2004:340 (Fig.10.22)
Ischium	Angulation of the superior border of the ischium has occurred		6 months			6 months		Scheuer and Black 2004:339 (Fig.10.22)
Innominate	Superior border of the ischium is square and the ischial spine, pubic tubercle and crest have developed		1 year			1 year		Scheuer and Black 2004:339 (Fig.10.22)
Pubis	Demarcation of the iliac and ischial articulation sites are clearly defined on the pubis		3-4 years			3-4 years		Scheuer and Black 2004:339 (Fig.10.22)
Pubis	Non-articular acetabular area is well defined on the pubis		5-6 years			5-6 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Ischiopubic ramus not fused			≤ 11 years			≤ 11 years	Flecker 1942
				≤ 11 years			**≤ 11 years**	**Schaefer, Black and Scheuer 2009**
Innominate	Fusion of the ischiopubic rami	5 years	8 years		5 years	8 years		Scheuer and Black 2004:340 (Fig.10.22)
		7 years	9 years		7 years	9 years		Ubelaker 1984:53
				until end of sixth year			until end of sixth year	Ferembach 1980 (WEA)
		7 years	8 years		7 years	8 years		Bass 1995:194

Innominate	Ischiopubic ramus fused			≥ 4 years			≥ 4 years	Flecker 1942
				≥ 5 years			**≥ 5 years**	**Schaefer, Black and Scheuer 2009**
Innominate	The anterior acetabular epiphysis or "os acetabuli" appears and ossific islands appear in triradiate cartilage	9 years	10 years		9 years	10 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	The posterior acetabular epiphysis commences ossification	10 years	11 years		10 years	11 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Acetabulum not fused			**≤ 14 years**			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**
				≤ 14 years			≤ 16 years	Cardoso 2008
Innominate	The acetabulum commences and complete fusion	11 years	15 years		14 years	17 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Fusion of acetabulum	**11 years**	**16 years**		**14 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		11 years	16 years		14 years	17 years		Cardoso 2008
				13 years			14 years	Acsádi and Nemeskéri 1970, from Todd 1930
				12 years			14 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				11.5 years			14 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		11.5 years	14.5 years		14 years	17 years		Johnston 1961
		13 years	16 years		13 years	16 years		Brothwell 1965:60
		10 years	16 years		13 years	17 years		Mays 1998, from Flecker 1942
		15 years	18 years		15 years	18 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		15 years	18 years		15 years	18 years		Nemeskéri et al. 1960
Innominate	The superior acetabular epiphysis appears	12 years	14 years		12 years	14 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Acetabulum completely fused			**≥ 14 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
				≥ 14 years			≥ 15 years	Cardoso 2008
Innominate	The iliac crest commences ossification	12 years	14 years		14 years	17 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Iliac crest epiphysis not fused			**≤ 16 years**			**≤ 20 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 19 years	Webb and Suchey 1985:462
				≤ 16 years			≤ 14 years	Cardoso 2008
Innominate	The iliac crest epiphyses commence fusion	17 years	20 years		17 years	20 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Fusion of iliac crest	**14 years**	**21 years**		**17 years**	**22 years**		**Schaefer, Black and Scheuer 2009**
		14 years	23 years		14 years	23 years		Webb and Suchey 1985:462
		15 years	21 years		16 years	21 years		Cardoso 2008
					14.5 years	21.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		14 years	15 years		14 years	19 years		Mays 1998, from Webb and Suchey 1985
		21 years	24 years		21 years	24 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16 years	23 years		16 years	23 years		Brothwell 1965:60
		21 years	24 years		21 years	24 years		Nemeskéri et al. 1960
		17.5 years			18.5 years			Johnston 1961
		17 years	19 years		17 years	20 years		Ubelaker 1984:53
		16 years	23 years		16 years	23 years		From McKern and Stewart (1957:57) in Bass 1995:195
		17 years	19 years		18 years	19 years		From Scoles et al. 1988 (in Cox 2000: 65)

Innominate	Iliac Crest Epiphysis completely fused	20 years	23 years		20 years	23 years		Scheuer and Black 2004:340 (Fig.10.22)
				≥ 18 years			**≥ 18 years**	**Schaefer, Black and Scheuer 2009**
				≥ 18 years			≥ 19 years	Cardoso 2008
				≥ 18 years			≥ 17 years	Webb and Suchey 1985:462
Innominate	The ischial epiphysis commences ossification	13 years	16 years		13 years	16 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	The ischial tuberosity is complete	16 years	18 years		16 years	18 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Ischial tuberosity epiphysis not fused			≤ 24 years			≤ 21 years	Flecker 1942
				≤ 15 years			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 16 years	Cardoso 2008
Innominate	Fusion of ischial tuberosity	17 years	25 years		17 years	25 years		Brothwell 1965:60
		15.5 years			18.5 years			Johnston 1961
		17 years	20 years		21 years	24 years		Nemeskéri et al. 1960
				15.5 years			18.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		16 years	20 years		17 years	22 years		Ubelaker 1984:53
		17 years	20 years		21 years	24 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		16 years	23 years		16 years	23 years		Bass 1995:19, from McKern and Stewart (1957:57)
		14 years	**19 years**		**16 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		14 years	19 years		15 years	21 years		Cardoso 2008
Innominate	The ischial epiphysis extends half way along the ramus	19 years	20 years		19 years	20 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Ischial tuberosity epiphysis completely fused	20 years	23 years		20 years	23 years		Scheuer and Black 2004:340 (Fig.10.22)
				≥ 16 years			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
				≥ 16 years			≥ 17 years	Cardoso 2008
Innominate	Centre appears for the anterior iliac spine	10 years	13 years		10 years	13 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Anterior Inferior Iliac Spine not fused			**≤ 14 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 15 years	Cardoso 2008
Innominate	Fusion of Anterior Inferior Iliac Spine	**14 years**	**18 years**		**16 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		15 years	16 years				15 years	Cardoso 2008
		16 years	23 years		16 years	23 years		Bass 1995:195, from McKern and Stewart (1957:57)
Innominate	Anterior Inferior Iliac Spine completely fused			**≥ 15 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
				≥ 14 years			≥ 15 years	Cardoso 2008
			20 years			20 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Dorsal plateau of the pubic symphisis may show gradual obliteration of the ridge-and-furrow appearance	15 years	23 years		15 years	23 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Dorsal margin forms along the dorsal border of the pubic symphyseal surface	20 years	23 years		20 years	23 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Start of epiphysis for the pubic tubercle and delimitation of the upper and lower borders of the symphyseal face	23 years	27 years		23 years	27 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Active ventral rampart formation and obliteration of the ridge-and-furrow appearance of the ventral and dorsal aspects of the pubic symphyseal face	24 years	30 years		24 years	30 years		Scheuer and Black 2004:340 (Fig.10.22)
Innominate	Ventral rampart is complete and the symphyseal rim is mature		35 years			35 years		Scheuer and Black 2004:340 (Fig.10.22)

Lower Limbs								
Femur	Appearance of ossification centre for distal epiphysis			Birth			Birth	Scheuer and Black 2004:355 (Fig.11.9)
				Birth			Birth	Acsádi and Nemeskéri 1970, from Vallois 1960
Femur	Distal epiphysis recognizable by characteristic shape		3-5 years			3-5 years		Scheuer and Black 2004:356 (Fig.11.9)
Femur	Distal epiphysis not fused			**≤ 16 years**			**≤ 19 years**	**Schaefer, Black and Scheuer 2009**
				≤ 16 years			≤ 18 years	Cardoso 2008
Femur	Fusion of distal epiphysis	14 years	18 years		16 years	20 years		Scheuer and Black 2004:356 (Fig.11.9)
		14 years	**19 years**		**16 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		14 years	19 years				17 years	Cardoso 2008
					14.5 years	21 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		14 years	19 years		16 years	19 years		Mays 1998, from Flecker 1942
		16 years	23 years		16 years	23 years		Brothwell 1965:60
				18 years			18 years	Acsádi and Nemeskéri 1970, from Todd 1930
				17 years			19 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				17 years			18.5 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		17 years	18 years		18.5 years			Johnston 1961
		15 years	19 years		17 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					17.5 years	18.5 years		Krogman 1939 from Todd 1930
		15 years	19 years		17 years	20 years		Nemeskéri et al. 1960
		17 years	19 years		17 years	19 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		14 years	17 years		14 years	19 years		Ubelaker 1984:53
		14 years	18 years			22 years		Bass 1995:220, female data from Pyle and Hoerr 1955 and male data from McKern and Stewart (1957:48)
Femur	Distal epiphysis completely fused			**≥ 17 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
				≥ 17 years			≥ 16 years	Cardoso 2008
Femur	Appearance of ossification centre for proximal epiphysis	postnatal	1 year		postnatal	1 year		Scheuer and Black 2004:355 (Fig.11.9)
				1 year			1 year	Acsádi and Nemeskéri 1970, from Vallois 1960
Femur	Epiphysis of head hemispherical and recognizable		3-4 years			3-4 years		Scheuer and Black 2004:356 (Fig.11.9)
Femur	Head not fused			**≤ 15 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 16 years	Cardoso 2008

Femur	Fusion of head	12 years	16 years		14 years	19 years		Scheuer and Black 2004:356 (Fig.11.9)
		14 years	**17 years**		**16 years**	**19 years**		**Schaefer, Black and Scheuer 2009**
					15.5 years	19.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		14 years	16 years		15 years	18 years		Cardoso 2008
		13 years	18 years		14 years	20 years		Mays 1998, from Flecker 1942
				17 years			17 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			17 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				14.5 years			17 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		14.5 years			17 years			Johnston 1961
		15 years	20 years		15 years	20 years		Brothwell 1965:60
		15 years	19 years		18 years	21 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					17 years	18 years		Krogman 1939 from Todd 1930
		15 years	19 years		18 years	21 years		Nemeskéri et al. 1960
		13 years	17 years		15 years	18 years		Ubelaker 1984:53
		17 years	20 years		17 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		14 years	19 years		14 years	19 years		Bass 1995:220, from McKern and Stewart (1957:48)
Femur	Head completely fused			**≥ 14 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
				≥ 15 years			≥ 16 years	Cardoso 2008
Femur	secondary centre for greater trochanter appears	2 years	5 years		2 years	5 years		Scheuer and Black 2004:355 (Fig.11.9)
Femur	Greater trochanter becomes recognizable	6 years	8 years		6 years	8 years		Scheuer and Black 2004:356 (Fig.11.9)
Femur	Greater trochanter not fused			**≤ 15 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 16 years	Cardoso 2008

Femur	Fusion of greater trochanter	14 years	16 years		16 years	18 years		Scheuer and Black 2004:356 (Fig.11.9)
		14 years	**17 years**		**16 years**	**19 years**		**Schaefer, Black and Scheuer 2009**
		13 years	16 years		15 years	18 years		Cardoso 2008
		14 years	16 years		15 years	17 years		Mays 1998, from Flecker 1942
		15 years	20 years		15 years	20 years		Brothwell 1965:60
				17 years			17 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			18 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				13.5 years			17 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		13.5 years	17 years		17 years	18 years		Johnston 1961
		15 years	19 years		18 years	21 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					15.5 years	19.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
					17 years	18 years		Krogman 1939 from Todd 1930
		15 years	19 years		18 years	21 years		Nemeskéri et al. 1960
		13 years	17 years		16 years	18 years		Ubelaker 1984:53
		14 years	19 years		14 years	19 years		Bass 1995:220, from McKern and Stewart (1957:48)
		17 years	20 years		17 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Femur	Greater trochanter completely fused			**≥ 14 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
				≥ 14 years			≥ 16 years	Cardoso 2008
Femur	Secondary centre for lesser trochanter appears	7 years	12 years		7 years	12 years		Scheuer and Black 2004:356 (Fig.11.9)
Femur	Lesser trochanter not fused			≤ 17 years			≤ 18 years	Flecker 1942
				≤ 15 years			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 15 years			≤ 16 years	Cardoso 2008
Femur	Fusion of lesser trochanter	16 years	17 years		16 years	17 years		Scheuer and Black 2004:356 (Fig.11.9)
		14 years	**17 years**		**16 years**	**19 years**		**Schaefer, Black and Scheuer 2009**
		15 years	20 years		15 years	20 years		Brothwell 1965:60
		13 years	16 years		15 years	18 years		Cardoso 2008
					15.5 years	19.5 years		Buikstra and Ubelaker 1994:43
		15 years	19 years		18 years	21 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		15 years	18 years		17 years	18 years		Johnston 1961
					17 years	18 years		Krogman 1939 from Todd 1930
		15 years	19 years		18 years	21 years		Nemeskéri et al. 1960
		13 years	17 years		15 years	17 years		Ubelaker 1984:53
		16 years			16 years			Acsádi and Nemeskéri 1970, from Vallois 1960
		14 years	19 years		14 years	19 years		Bass 1995:220, from McKern and Stewart (1957:48)

Femur	Lesser trochanter completely fused			**≥ 14 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
				≥ 14 years			≥ 16 years	Cardoso 2008
Patella	represented by cartilaginous patella			Birth			Birth	Scheuer and Black 2004:358
Patella	Multifocal ossification centres appear	1.5 years	3.5 years		1.5 years	3.5 years		Scheuer and Black 2004:358
Patella	Appearance of ossification centre	3 years	5 years		3 years	5 years		Acsádi and Nemeskéri 1970, from Vallois 1960
Patella	Becomes biconvex in shape	4 years	5 years		4 years	5 years		Scheuer and Black 2004:358
Patella	Assumes essentially adult contours			Puberty			Puberty	Scheuer and Black 2004:358
Tibia	Appearance of ossification centre for proximal epiphysis			Birth			Birth	Scheuer and Black 2004:369 (Fig.11.15)
				birth			birth	Acsádi and Nemeskéri 1970, from Vallois 1960
Tibia	Appearance of ossification centre for distal epiphysis			2 years			2 years	Acsádi and Nemeskéri 1970, from Vallois 1960
Tibia	Medial malleolus starts to ossify	3 years	5 years	3 years	5 years			Scheuer and Black 2004:369 (Fig.11.15)
Tibia	Distal part of tuberosity starts to ossify from one or more centres	8 years	13 years		8 years	13 years		Scheuer and Black 2004:369 (Fig.11.15)
Tibia	Proximal and distal parts of tuberosity unite	12 years	14 years		12 years	14 years		Scheuer and Black 2004:369 (Fig.11.15)
Tibia	Distal epiphysis not fused			**≤ 17 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 16 years			≤ 18 years	Cardoso 2008
				< 13 years			<15 years	Crowder and Austin 2005
Tibia	Fusion of distal epiphysis	14 years	16 years		15 years	18 years		Scheuer and Black 2004:369 (Fig.11.15)
		14 years	**17 years**		**16 years**	**18 years**		**Schaefer, Black and Scheuer 2009**
		13 years	16 years		14 years	18 years		Mays 1998, from Flecker 1942
		11 years	15 years		12 years	18 years		Crowder and Austin 2005
		14 years	16 years		15 years	17 years		Cardoso 2008
		16 years	20 years		16 years	20 years		Brothwell 1965:60
				15 years			16 years	Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			17 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				15 years			17 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		15 years	18 years		17 years	18 years		Johnston 1961
		15 years	18 years		17 years	19 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					14.5 years	19.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
					15.5 years	16.5 years		Krogman 1939 from Todd 1930
		15 years	18 years		17 years	19 years		Nemeskéri et al. 1960
		14 years	16 years		14 years	18 years		Ubelaker 1984:53
		16 years	19 years		16 years	19 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		11-13 years	17 years		14-16 years	20 years		Bass 1995:247
Tibia	Distal epiphysis completely fused			**≥ 15 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
				≥ 15 years			≥ 16 years	Cardoso 2008
				> 11 years			> 13 years	Crowder and Austin 2005
Tibia	Proximal epiphysis not fused			**≤ 17 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 16 years			≤ 18 years	Cardoso 2008

Tibia	Fusion of proximal epiphysis	13 years	17 years		15 years	19 years		Scheuer and Black 2004:369 (Fig.11.15)
		14 years	**18 years**		**16 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		14 years	19 years		16 years	19 years		Cardoso 2008
		16 years	23 years		16 years	23 years		Brothwell 1965:60
		14 years	18 years		16 years	19 years		Mays 1998, from Flecker 1942
				18 years				Acsádi and Nemeskéri 1970, from Todd 1930
				14 years			18 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				16 years			18 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		16 years	18 years		18 years			Johnston 1961
					15.5 years	22 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		15 years	19 years		17 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					17.5 years	18.5 years		Krogman 1939 from Todd 1930
		15 years	19 years		17 years	20 years		Nemeskéri et al. 1960
		14 years	17 years		15 years	19 years		Ubelaker 1984:53
		17 years	20 years		17 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		14 years	18 years		16-17 years	23 years		Bass 1995:247
Tibia	Proximal epiphysis completely fused			**≥ 18 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
				≥ 18 years			≥ 17 years	Cardoso 2008
Fibula	Represented by shaft only			Birth			Birth	Scheuer and Black 2004:376 (Fig.11.20)
Fibula	Appearance of ossification centre for distal epiphysis	9 months	22 months		9 months	22 months		Scheuer and Black 2004:376 (Fig.11.20)
				2 years			2 years	Acsádi and Nemeskéri 1970, from Vallois 1960
Fibula	Appearance of ossification centre for proximal epiphysis	3 years	5 years		3 years	5 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		3 years	4 years		4 years	5 years		Scheuer and Black 2004:376 (Fig.11.20)
Fibula	Ossification of styloid process	7 years	8 years		10 years	11 years		Scheuer and Black 2004:376 (Fig.11.20)
Fibula	Distal epiphysis not fused			**≤ 17 years**			**≤ 18 years**	**Schaefer, Black and Scheuer 2009**
				≤ 16 years			≤ 16 years	Cardoso 2008
				< 14 years			< 16 years	Crowder and Austin 2005

Fibula	Fusion of distal epiphysis	12 years	15 years		15 years	18 years		Scheuer and Black 2004:376 (Fig.11.20)
		14 years	**17 years**		**15 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		14 years	16 years		15 years	18 years		Mays 1998, from Flecker 1942
		11 years	15 years		12 years	18 years		Crowder and Austin 2005
		14 years	16 years		15 years	18 years		Cardoso 2008
		16 years	20 years		16 years	20 years		Brothwell 1965:60
				15 years			16 years	Acsádi and Nemeskéri 1970, from Todd 1930
				15 years			17 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				15 years			17 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		15 years			17 years			Johnston 1961
					14.5 years	19.5 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
		15 years	18 years		17 years	19 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					15.5 years	16.5 years		Krogman 1939 from Todd 1930
		15 years	18 years		17 years	19 years		Nemeskéri et al. 1960
		13 years	16 years		14 years	18 years		Ubelaker 1984:53
		16 years	19 years		16 years	19 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		11-12 years	17 years		14-15 years	20 years		Bass 1995:258
Fibula	Distal epiphysis completely fused			**≥ 15 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
				≥ 15 years			≥ 17 years	Schaefer, Black and Scheuer 2009
				> 11 years			> 13 years	Crowder and Austin 2005
Fibula	Proximal epiphysis not fused			**≤ 17 years**			**≤ 19 years**	***Schaefer, Black and Scheuer 2009***
				≤ 16 years			≤ 18 years	Cardoso 2008

Fibula	Fusion of proximal epiphysis	12 years	17 years		15 years	20 years		Scheuer and Black 2004:376 (Fig.11.20)
		14 years	**17 years**		**16 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		14 years	18 years		16 years	19 years		Mays 1998, from Flecker 1942
		14 years	17 years				17 years	Cardoso 2008
		16 years	23 years		16 years	23 years		Brothwell 1965:60
				18 years				Acsádi and Nemeskéri 1970, from Todd 1930
				17 years			18 years	Acsádi and Nemeskéri 1970, from Flecker 1942
				16 years			18 years	Acsádi and Nemeskéri 1970, from Johnston 1961
		16 years	19 years		18 years			Johnston 1961
		15 years	19 years		17 years	20 years		Ferembach 1980 (WEA) + Szilvássy in Knußmann and Martin 1988, from Brothwell 1965&1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
					14.5 years	21 years		Buikstra and Ubelaker 1994:43 (after Krogman and Iscan 1986, McKern and Stewart 1957, Redfield 1970, Suchey et al 1984 and Ubelaker 1989a and b)
					17.5 years	18.5 years		Krogman 1939 from Todd 1930
		15 years	19 years		17 years	20 years		Nemeskéri et al. 1960
		14 years	18 years		14 years	20 years		Ubelaker 1984:53
		17 years	20 years		17 years	20 years		Acsádi and Nemeskéri 1970, from Vallois 1960
		14-15 years	17 years		16-17 years	22 years		Bass 1995:258
Fibula	Proximal epiphysis completely fused			**≥ 15 years**			**≥ 17 years**	**Schaefer, Black and Scheuer 2009**
				≥ 17 years			≥ 16 years	Cardoso 2008
Feet								
Feet	At least 16 of the primary centres of ossification for the long bones of the foot are present (middle phalanges of the lateral toes may appear after birth). In addition, both the calcaneus and talus are present and can be identified in isolation (cuboid centre of ossification may be present)			Birth			Birth	Scheuer and Black 2004:407 (Fig.11.41)
Cuboid	Ossification centre appears	1 month	3 months		1 month	3 months		Scheuer and Black 2004:407 (Fig.11.41)
Cuboid	Can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
Lateral cuneiform	Ossification centre appears	3 months	6 months		3 months	6 months		Scheuer and Black 2004:407 (Fig.11.41)
Lateral cuneiform	Can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
Medial cuneiform	Ossification centre appears	12 months	24 months		24 months	36 months		Scheuer and Black 2004:407 (Fig.11.41)
Medial cuneiform	Can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
Intermediate cuneiform	Ossification centre appears	24 months	36 months		36 months	48 months		Scheuer and Black 2004:407 (Fig.11.41)
Intermediate cuneiform	Can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
Navicular	Ossification centre appears	2 years	3 years		4 years	5 years		Scheuer and Black 2004:407 (Fig.11.41)
Navicular	Can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
Navicular	Epiphysis may appear (and fuse shortly after)	9 years	10 years		12 years	13 years		Scheuer and Black 2004:407 (Fig.11.41)
Calcaneus	Epiphysis appears	5 years	6 years		7 years	8 years		Scheuer and Black 2004:407 (Fig.11.41)
Calcaneus	Epiphysis not fused			**≤ 12 years**			**≤ 16 years**	**Schaefer, Black and Scheuer 2009**

Calcaneus	Epiphysis commences fusion	10 years	12 years		11 years	14 years		Scheuer and Black 2004:407 (Fig.11.41)
Calcaneus	Fusion of epiphysis	**10 years**	**17 years**		**14 years**	**20 years**		**Schaefer, Black and Scheuer 2009**
		15 years	20 years		15 years	20 years		Nemeskéri et al. 1960
		12 years	16 years		14 years	18 years		Mays 1998, from Flecker 1942
		12 years	22 years		12 years	22 years		Brothwell 1965:60
		16 years	19 years		16 years	19 years		Ferembach 1980 (WEA) from Brothwell 1965, Wolff-Heidegger 1954, Rauber & Kopsch 1952, Haret et al. 1927 and Gray's Anatomy 1967
		15 years	20 years		15 years	20 years		Szilvássy in Knußmann and Martin 1988, from Brothwell 1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		14.5 years	18 years		16.5 years	18.5 years		Johnston 1961
					14.5 years	15.5 years		Krogman 1939 from Todd 1930
Calcaneus	Completion of fusion at the calcaneal epiphysis	15 years	16 years		18 years	20 years		Scheuer and Black 2004:408 (Fig.11.41)
Calcaneus	Epiphysis completely fused			**≥ 14 years**			**≥ 16 years**	**Schaefer, Black and Scheuer 2009**
Talus	Epiphysis appears, fusion completed within a year			8 years			11 years	Scheuer and Black 2004:407 (Fig.11.41)
Sesamoid bones	Sesamoids of great toe appear			9 years			12 years	Scheuer and Black 2004:407 (Fig.11.41)
MT1	Epiphysis for base appears	18 months	20 months		26 months	31 months		Scheuer and Black 2004:407 (Fig.11.41)
MT1	Head can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
MT1	Epiphyseal fusion of base	13 years	15 years		16 years	18 years		Scheuer and Black 2004:408 (Fig.11.41)
		16 years	20 years		16 years	20 years		Ferembach 1980 (WEA) from Brothwell 1965, Wolff-Heidegger 1954, Rauber & Kopsch 1952, Haret et al. 1927 and Gray's Anatomy 1967
		14.5 years	15 years		17 years	18 years		Johnston 1961
MT2	Epiphysis for head appears	19 months	24 months		27 months	34 months		Scheuer and Black 2004:407 (Fig.11.41)
MT2	Head can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
MT2	Epiphyseal fusion of head	11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
MT3	Epiphysis for head appears			2 years 5 months			3 years 5 months	Scheuer and Black 2004:407 (Fig.11.41)
MT3	Head can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
MT3	Epiphyseal fusion of head	11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
MT4	Epiphysis for head appears			2 years 8 months			4 years	Scheuer and Black 2004:407 (Fig.11.41)
MT4	Head can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
MT4	Epiphyseal fusion of head	11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
MT5	Epiphysis for head appears	2 years	3 years		4 years	5 years		Scheuer and Black 2004:407 (Fig.11.41)
MT5	Head can be identified	3 years	5 years		5 years	7 years		Scheuer and Black 2004:407 (Fig.11.41)
MT5	Epiphysis at base may appear and will fuse within the next 24 months	9 years	10 years		12 years	13 years		Scheuer and Black 2004:407 (Fig.11.41)
MT5	Epiphyseal fusion of head	11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
MT2-MT5	Epiphyseal fusion of head	15 years	20 years		15 years	20 years		Ferembach 1980 (WEA) from Brothwell 1965, Wolff-Heidegger 1954, Rauber & Kopsch 1952, Haret et al. 1927 and Gray's Anatomy 1967
MT	Epiphyses not fused			**≤ 13 years**			**≤ 17 years**	**Schaefer, Black and Scheuer 2009**

MT	Fusion of epiphyses	**11 years**	**13 years**		**14 years**	**16 years**		**Schaefer, Black and Scheuer 2009**
		12 years	22 years		12 years	22 years		Brothwell 1965:60
		15 years	20 years		15 years	20 years		Szilvássy in Knußmann and Martin 1988, from Brothwell 1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		14 years	18 years		15 years	18 years		Mays 1998, from Flecker 1942
					15 years	16 years		Krogman 1939 from Todd 1930
		15 years	20 years		15 years	20 years		Nemeskéri et al. 1960
MT	Epiphyses completely fused			**≥ 11 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
Proximal phalanges	Epiphyses for proximal phalanges appear	11 months	20 months		18 months	28 months		Scheuer and Black 2004:407 (Fig.11.41)
Proximal phalanges	Epiphyseal fusion	13 years	15 years		16 years	18 years		Scheuer and Black 2004:408 (Fig.11.41)
					14.5 years	15.5 years		Krogman 1939 from Todd 1930
Middle phalanges 2-4	Epiphyses for middle phalanges 2-4 appear	11 months	14 months		14 months	24 months		Scheuer and Black 2004:407 (Fig.11.41)
Middle phalanges	Epiphyseal fusion				14 years	15 years		Krogman 1939 from Todd 1930
		11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
Distal phalanges 2-4	Epiphyses appear	2 years	3 years		4 years	5 years		Scheuer and Black 2004:407 (Fig.11.41)
Distal phalanges	Epiphyseal fusion	11 years	13 years		14 years	16 years		Scheuer and Black 2004:408 (Fig.11.41)
Phalanges	Epiphyses not fused			**≤ 13 years**			**≤ 17 years**	**Schaefer, Black and Scheuer 2009**
Phalanges	Fusion of epiphyses	**11 years**	**13 years**		**14 years**	**16 years**		**Schaefer, Black and Scheuer 2009**
		12 years	22 years		12 years	22 years		Brothwell 1965:60
		12 years	18 years		15 years	17 years		Mays 1998, from Flecker 1942
		15 years	20 years		15 years	20 years		Nemeskéri et al. 1960
		15 years	20 years		15 years	20 years		Szilvássy in Knußmann and Martin 1988, from Brothwell 1972, Gray's Anatomy 1967, Haret et al. 1927, Rauber & Kopsch 1952 and Wolff-Heidegger 1954
		15 years	20 years		15 years	20 years		Ferembach 1980 (WEA) from Brothwell 1965, Wolff-Heidegger 1954, Rauber & Kopsch 1952, Haret et al. 1927 and Gray's Anatomy 1967
Phalanges	Epiphyses completely fused			**≥ 11 years**			**≥ 15 years**	**Schaefer, Black and Scheuer 2009**
All data adapted by the author from the references quoted								
Bold indicates references used in this doctoral research, see thesis section 3.2.3 and figure 3.1.								

Appendix 5

Age categories

This doctoral research	Knußmann & Martin 1988	Buikstra & Ubelaker 1994	Scheuer & Black 2000	Lewis 2007	Pinhasi 2008
Foetus		**Fetal**	**Foetus**	**Foetus**	
3 fetal months - Birth		Before birth	3 fetal months - Birth	3 fetal months - Birth	
Neonate			**Neonate**	**Neonate**	
Birth -1 month			Birth -1 month	Birth -1 month	
Infant		**Infant**	**Infant**	**Infant**	**Infancy**
Birth -1 year		Birth -3 years	Birth -1 year	Birth -1 year	0-3 years
Child		**Child**		**Child**	
1-12 years		3-12 years		1-14.6 years	
Young child	**Infans I**		**Early childhood**		**Childhood**
1-5 years	0-7 years		≤ 5 years		3-7 years
Middle child	**Infans II**		**Late childhood**		**Juvenility**
6-12 years	7-14 years		6 years- puberty		7-10 yrs♀ 7-12 yrs♂
Adolescent	**Juvenis**	**Adolescent**		**Adolescent**	**Adolescence**
13-17 years	14-22 years	12-20 years		14.6–17 years	10-19 yrs♀ 12-21 yrs♂
Juvenile				**Non-adult**	
< 18 years				< 18 years	
Adult				**Adult**	
18+ years				>17 years	
Young adult	**Adultus**	**Young adult**			
18-34 years	20-40 years	20-35 years			
Mature Adult	**Maturus**	**Middle adult**			
35-49 years	40-60 years	35-50 years			
Old adult	**Senium**	**Old adult**			
50 + years	60+	50+ years			

Appendix 6: Inventory of skeletal remains analysed

Deszk - Olajkút

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
DOL-01	Deszk	Olajkút	5	5253							Körös
DOL-02	Deszk	Olajkút	6	5254							Körös

Hódmezővásárhely - Bodzáspart

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer / sub-site	Depth	Sector	Date	Comments	Culture
HBP-01	Hódmezővásárhely	Bodzáspart	?	158							Körös

Hódmezővásárhely – Kotac-part

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HKO-01	Hódmezővásárhely	Kotac-part	3/5	111							Körös
HKO-02	Hódmezővásárhely	Kotac-part	3/8	112		Vata-tanya				Vata-tanya	Körös
HKO-03	Hódmezővásárhely	Kotac-part		113							Körös
HKO-04	Hódmezővásárhely	Kotac-part	3/3	116							Körös
HKO-05	Hódmezővásárhely	Kotac-part		130							Körös
HKO-06	Hódmezővásárhely	Kotac-part	25/1	131							Körös
HKO-07	Hódmezővásárhely	Kotac-part	25/2	132							Körös
HKO-08	Hódmezővásárhely	Kotac-part	6/1	133							Körös

Hódmezővásárhely –Kovács-tanya

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HKJ-01	Hódmezővásárhely	Kovács-tanya		3307							Körös

Békés – Povádzug

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
BKP-01	Békés	Povádzug	1	2249							Tisza
BKP-02	Békés	Povádzug	42	2290							Tisza
BKP-03	Békés	Povádzug	43	2291							Tisza
BKP-04	Békés	Povádzug	44	2292							Tisza
BKP-05	Békés	Povádzug	46	2294							Tisza

Deszk - Ordos

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
DOR-01	Deszk	Ordos	1	9069							Tisza

Hódmezővásárhely – Kökénydomb – Szabó-tanya

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HKS-01	Hódmezővásárhely	Kökénydomb	1	160		Szabó-tanya					Tisza
HKS-02	Hódmezővásárhely	Kökénydomb	2	161		Szabó-tanya					Tisza
HKS-03	Hódmezővásárhely	Kökénydomb	3	162		Szabó-tanya					Tisza
HKS-04	Hódmezővásárhely	Kökénydomb	7	2886		Szabó-tanya					Tisza

Hódmezővásárhely – Kökénydomb

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HKK-01	Hódmezővásárhely	Kökénydomb	1	9613							Tisza
HKK-02	Hódmezővásárhely	Kökénydomb	2a	9614							Tisza
HKK-03	Hódmezővásárhely	Kökénydomb	2b	9615							Tisza
HKK-04	Hódmezővásárhely	Kökénydomb	3	9616							Tisza

Hódmezővásárhely – Kökénydomb – Vörös-tanya

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HKV-01	Hódmezővásárhely	Kökénydomb		159		Vörös-tanya					Tisza

Hódmezővásárhely-Gorzsa

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HGO-01	Hódmezővásárhely	Gorzsa	2	8999	III/b	Phase B	-135	B/10	20/09/1979		Tisza
HGO-02	Hódmezővásárhely	Gorzsa	3	9000	III/b	?	-142	G/3	17/08/1979		Tisza
HGO-03	Hódmezővásárhely	Gorzsa	3a	?	III				16/09/1979	in pot above grave 3	Tisza
HGO-04	Hódmezővásárhely	Gorzsa	4	9001	III/b	?	-125	G/3-4	03/08/1979		Tisza
HGO-05	Hódmezővásárhely	Gorzsa	5	9002	III/c	?	-205	C/20-21	28/07/1980		Tisza
HGO-06	Hódmezővásárhely	Gorzsa	7	9003	VIII	5.szint, 4.padlo (=floor)	-147	E-F/23-24	04/08/1981		Tisza
HGO-07	Hódmezővásárhely	Gorzsa	8	9004	VIII	4-5. padlo k.	-150	25/E-F	06/08/1981		Tisza
HGO-08	Hódmezővásárhely	Gorzsa	10	9005	VIII	?	-120	D/23	14/09/1981		Tisza
HGO-09	Hódmezővásárhely	Gorzsa	11	9006	XII	Phase B	-173	I/5	16/07/1982	Above grave 17 (HGO-13 and HGO-14)	Tisza
HGO-10	Hódmezővásárhely	Gorzsa	12	9007	XII	?	-186	?	04/08/1982	+23/07/1982	Tisza
HGO-11	Hódmezővásárhely	Gorzsa	15	9008	X	?	-205	L/21	23/07/1982		Tisza
HGO-12	Hódmezővásárhely	Gorzsa	16	9009	IX	?	-264	K/26-27	03/08/1982		Tisza
HGO-13	Hódmezővásárhely	Gorzsa	17	9010	XII	?	-179	I/5-6	01/08/1982		Tisza
HGO-14	Hódmezővásárhely	Gorzsa	17a	?	XII	found in the pelvic area of individual from 17 sir	-179	I/5-6	01/08/1982		Tisza
HGO-15	Hódmezővásárhely	Gorzsa	18	9011	XII	?	-218	M/9-10	02/08/1982		Tisza
HGO-16	Hódmezővásárhely	Gorzsa	19	9012	XII	?	-218	N/9-10	02/08/1982	sz.22 probably belong to same ind.	Tisza
HGO-17	Hódmezővásárhely	Gorzsa	20	9013	XII	pit 82	-220	J/1-2	05/08/1982	+ sz.24 (15/07/1982)	Tisza
HGO-19	Hódmezővásárhely	Gorzsa	24	9014	IX	?	-214	K-L/22-23	12/07/1982		Tisza
HGO-20	Hódmezővásárhely	Gorzsa	25	9015	XII	?	-237	?	25/07/1983		Tisza
HGO-21	Hódmezővásárhely	Gorzsa	26	9705	IX	?	-244	?	27/08/1984	+25/08/1984	Tisza
HGO-22	Hódmezővásárhely	Gorzsa	27	9706	IX	?	-271 to -276	?	21/08/1984		Tisza
HGO-23	Hódmezővásárhely	Gorzsa	28	9707	IX	?	-227	?	23/08/1984		Tisza
HGO-24	Hódmezővásárhely	Gorzsa	29	9708	IX	?	?	?	10/09/1984		Tisza
HGO-25	Hódmezővásárhely	Gorzsa	30	9709	IX	?	?	?	07/09/1984		Tisza
HGO-26	Hódmezővásárhely	Gorzsa	31	9710	IX	?	-284	?	17/08/1985		Tisza

HGO-27	Hódmezővásárhely	Gorzsa	32	9711+ 9718	IX	?	-240 to -288	?	17/08/1985	+skull excavated 17/09/1984, first recorded as HGO-66	Tisza
HGO-28	Hódmezővásárhely	Gorzsa	33	9712	IX	?	-334	?	15/09/1984		Tisza
HGO-30	Hódmezővásárhely	Gorzsa	35	9714	XXXIII	recorded as Copper Age in the inventory	?	?	30/09/1984		Tisza
HGO-31	Hódmezővásárhely	Gorzsa	37	9715	XII	North Eastern profile	+0.23	?	29/09/1984		Tisza
HGO-32	Hódmezővásárhely	Gorzsa	39	9716	XIII	V/B or V/6 phase	?	?	26/07/1985		Tisza
HGO-33	Hódmezővásárhely	Gorzsa	40	9717	IX	Correction of square	-242	?	20/08/1985	+18/08/1985	Tisza
HGO-34	Hódmezővásárhely	Gorzsa	41	?	XI	?	-258	?	31/07/1986		Tisza
HGO-35	Hódmezővásárhely	Gorzsa	43	?	XVIII	?	-217	?	01/08/1986		Tisza
HGO-36	Hódmezővásárhely	Gorzsa	44	?	V-XII	from wall between section 5 and 12	-200	?	07/08/1986		Tisza
HGO-37	Hódmezővásárhely	Gorzsa	45	?	V-XII	from wall between section 5 and 12, 7 Neolithic layer, pit 380	?	?	11/08/1996		Tisza
HGO-38	Hódmezővásárhely	Gorzsa	46	?	V	?	-223	?	16/08/1986	+21/08/1986	Tisza
HGO-39	Hódmezővásárhely	Gorzsa	47	?	V	?	-230	?	20/08/1986		Tisza
HGO-40	Hódmezővásárhely	Gorzsa	48	?	V	?	-229	?	21/08/1986	+19/8/1986	Tisza
HGO-41	Hódmezővásárhely	Gorzsa	49	?	XI	?	?	?	?		Tisza
HGO-42	Hódmezővásárhely	Gorzsa	50	?	XVIII	?	-295	?	31/08/1987		Tisza
HGO-43	Hódmezővásárhely	Gorzsa	51	?	XVIII	?	-293	?	31/08/1987		Tisza
HGO-44	Hódmezővásárhely	Gorzsa	53	?	XVII	1. Neol.	?	?	07/08/1988		Tisza
HGO-45	Hódmezővásárhely	Gorzsa	54	?	XVII	1. Neol.	?	?	07/08/1988		Tisza
HGO-46	Hódmezővásárhely	Gorzsa	56	?	XVII	2. Neol	-181	?	09/08/1988		Tisza
HGO-47	Hódmezővásárhely	Gorzsa	57	?	XVII	?	?	?	?	no head	Tisza
HGO-48	Hódmezővásárhely	Gorzsa	58	?	XVIII	?	-193	?	28/08/1988		Tisza
HGO-49	Hódmezővásárhely	Gorzsa	59	?	XVII	?	?	?	29/09/1988	with skull frags of an older child [HGO-87]	Tisza
HGO-50	Hódmezővásárhely	Gorzsa	60	?	?	?	-172	?	29/09/1988		Tisza
HGO-51	Hódmezővásárhely	Gorzsa	61	?	XXI	?	-227	?	11/08/1990		Tisza
HGO-52	Hódmezővásárhely	Gorzsa	63	?	VI	11 Neol.	-271	?	27/08/1991		Tisza
HGO-53	Hódmezővásárhely	Gorzsa	64	?	VI	?	?	?	26/08/1993		Tisza
HGO-54	Hódmezővásárhely	Gorzsa	66	?	V/B	?	?	?	24/08/1994		Tisza
HGO-55	Hódmezővásárhely	Gorzsa	67	?	V/B	?	?	?	24/08/1994		Tisza
HGO-56	Hódmezővásárhely	Gorzsa	68	?	V/B	?	-343	?	16/09/1994		Tisza
HGO-57	Hódmezővásárhely	Gorzsa	69	?	V/B	?	?	?	08/09/1994		Tisza
HGO-68	Hódmezővásárhely	Gorzsa	?	sz.26	XII	middle of ditch	?	?	21/07/1982	theoretically with sz.25	Tisza
HGO-69	Hódmezővásárhely	Gorzsa	?	sz.27	XII	4th Neolithic layer, ditch 1	?	?	07/07/1982		Tisza
HGO-70	Hódmezővásárhely	Gorzsa	?	?	VIII	cleaning of 4th Neolithic floor	?	?	30/07/1981		Tisza
HGO-71	Hódmezővásárhely	Gorzsa	?	sz.10	VIII	layer between 3rd and 4th Neolithic floor	?	?	23/07/1981	probably same individual sz.10a [HGO-72]	Tisza
HGO-72	Hódmezővásárhely	Gorzsa	?	sz.10a	VIII	under 2nd Neolithic floor	?	?	10/07/1981	probably same individual sz.10 [HGO-71]	Tisza
HGO-73	Hódmezővásárhely	Gorzsa	?	sz.28	III	House 2	?	G5	08/10/1979		Tisza
HGO-74	Hódmezővásárhely	Gorzsa	?	?	III	House 2, pit 9, item 2/6	?	?	09/11/1979		Tisza
HGO-75	Hódmezővásárhely	Gorzsa	?	sz.8	III/C	from the layer between the surfaces that belong to the 4th and 5th floor	?	?	21/07/1980	maybe in connection with no.8	Tisza
HGO-76	Hódmezővásárhely	Gorzsa	?	?	VIII	6th Neolithic layer, under the 4th floor	?	?	05/08/1981 06/08/1981 1978-1982	Same individual in 3 different bags, so subcatalogues as HGO-76a, HGO-76b and HGO-76c	Tisza
HGO-78	Hódmezővásárhely	Gorzsa	?	sz.18	X	2nd Neolithic layer, pit 17	?	?	08/09/1981		Tisza
HGO-79	Hódmezővásárhely	Gorzsa	?	sz.17	X	from 1st Neolithic ruins level	?	?	14/08/1981		Tisza
HGO-81	Hódmezővásárhely	Gorzsa	?	sz.13	IX	pit 25	?	?	06/10/1981		Tisza
HGO-82	Hódmezővásárhely	Gorzsa	?	sz.19	XI	pit 54	?	?	28/06/1982	square X on box, but original record Square XI	Tisza
HGO-84	Hódmezővásárhely	Gorzsa	?	sz.11	IX	south west wall section, digging towards 2nd Neolithic layer	?	?	15/06/1982		Tisza
HGO-86	Hódmezővásárhely	Gorzsa	?	sz.8	III/C	from the layer between the surfaces that belong to the 4th and 5th floor	?	?	21/07/1980	"maybe in connection with no.8" (was part of HGO-75, but different individual (juv)	Tisza
HGO-87	Hódmezővásárhely	Gorzsa	59	?	XVII	?	?	?	29/09/1988	Skull frags of a much older child from with HGO-49 (young child)	Tisza

Hódmezővásárhely – Z bérház

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
HZB-01	Hódmezővásárhely	Z bérház		2174							Neolithic

Ószentiván

Ref #	Locality	Site	Sir #	Tszk #	Square	Layer	Depth	Sector	Date	Comments	Culture
OSZ-01	Ószentiván		1	2884							Neolithic

Sir # = grave number **Tszk #** = inventory number at the Department of Anthropology, University of Szeged, Hungary

Appendix 7
Neonates body length / age estimates

HGO-14

Right ilium length =	3.58	cm	Body length =	55.0292	cm
Right ilium width =	3.08	cm	Body length =	52.6456	cm
Average estimated body length ~				**54**	**cm**

HGO-31

Right scapula length =	3.52	cm	Body length =	51.9264	cm
Right scapula width =	2.64	cm	Body length =	46.9424	cm
Left radius length =	**5.08**	**cm**	Body length =	51.7888	cm
Left femur length =	6.94	cm	Body length =	49.2036	cm
Left femur distal width =	2.05	cm	Body length =	53.9615	cm
Right femur length =	6.97	cm	Body length =	49.3968	cm
Right femur distal width =	2.06	cm	Body length =	54.1878	cm
Average estimated body length from equations ~				**51**	**cm**
Body length estimation from directly proportional bone (radius) =				**51**	**cm**

HGO-55

Left petrous part of temporal width =	2.04	cm	Body length =	57.5888	cm
Right petrous part of temporal width =	2.23	cm	Body length =	62.5706	cm
Right petrous part of temporal length =	3.88	cm	Body length =	53.4348	cm
Basilar part of occipital width =	1.52	cm	Body length =	52.9992	cm
Lesser wing length =	2.11	cm	Body length =	55.9874	cm
Lesser wing width =	1.44	cm	Body length =	62.5636	cm
Body of sphenoid length =	1.08	cm	Body length =	48.2272	cm
Body of sphenoid width =	1.72	cm	Body length =	48.6244	cm
Right greater wing length =	3.13	cm	Body length =	51.7543	cm
Right greater wing width =	2.14	cm	Body length =	60.763	cm
Left zygomatic bone length =	**2.42**	**cm**	Body length =	48.2934	cm
Left zygomatic bone width =	2.05	cm	Body length =	52.968	cm
Left half mandible full length =	**4.95**	**cm**	Body length =	51.631	cm
Mandible width =	1.92	cm	Body length =	54.2488	cm
1st rib length =	**2.19**	**cm**	Body length =	47.6407	cm
Left ischium length =	1.7	cm	Body length =	49.305	cm
Left ischium width =	1.23	cm	Body length =	52.5241	cm
Right Ischium length =	1.7	cm	Body length =	49.305	cm
Left pubic bone length =	1.6	cm	Body length =	52.29	cm
Right pubic bone length =	1.59	cm	Body length =	52.075	cm
Right femur length =	7.46	cm	Body length =	52.5524	cm
Left fibula length =	6.09	cm	Body length =	50.9031	cm
Metatarsal length =	1.43	cm	Body length =	54.7034	cm
Average estimated body length ~				**53**	**cm**
Body length estimation from directly proportional bone (zygomatic) =				**48**	**cm**
Body length estimation from directly proportional bone (mandible) =				**50**	**cm**
Body length estimation from directly proportional bone (radius) =				**47**	**cm**

Age indication also in bone formation:

Frontal fusion =	< 2 years
Temporal formation =	birth to 6 months
Pars basilaris proportion =	<5 months post partum
Pars squama formation =	< 6 months
Sphenoid fusion =	< 1 year
Mandible fusion =	≤ 8 months
Dental development =	birth ± 2 months
Spine development =	infant

Data by the author using Fazekas and Kósa's equations

Appendix 8
Age estimates from scapular measurements

	Dental Age	Skeletal Age	Scapular Length	Scapular width	Infrascapular height	Suprascapular height	Acromial width	Max. length glenoidal surface	Mid.diameter glenoidal surface	Max. length glenoidal mass
HGO-31		Neonate	*35.3 mm*	*26 mm*	*27.6 mm*	*15.7 mm*		*7.4 mm*	*6.8 mm*	*10.8 mm*
			-0.10 yr	**-0.67 yr**	**-0.51 yr**	**1.49 yrs**		**-1.85 yrs**	**0.42 yr**	**-1.54 yrs**
HGO-55	0-1 mth	Neonate								*11 mm*
										-0.54 yr
HGO-02	6 mths	6 mths – 1 yr						*12.8 mm*	*8.8 mm*	
								1.58 yrs	**2.14 yr**	
HGO-33	6 mths	6 mths – 1 yr							*8.3 mm*	*13.7 mm*
									1.71 yrs	**-0.26 yr**
HGO-43	6 mths	6 mths						*8.6 mm*	*7.9 mm*	*14.9 mm*
								-1.09 yrs	**1.37 yrs**	**0.27 yr**
HGO-57	6 mths	6 mths						*9.8 mm*	*6.7 mm*	*14.9 mm*
								-0.33 yr	**0.34 yr**	**0.27 yr**
HGO-54	11-12 yrs	Middle child					*16.3 mm*	*24.6 mm*	*15.8 mm*	
							15.6 yrs	**9.07 yrs**	**8.16 yrs**	
HGO-50	12-15 yrs	♀ 12-13 yrs						*24 mm*	*16.9 mm*	
		♂ 14-15 yrs						**8.7 yrs**	**9.07 yrs**	

Measurements in italics

Age estimates obtained with Rissech and Black's (2007) functions in bold

Appendix 9
Juvenile sex estimates

Sex estimates from sciatic notch dimensions based on proportions in Fazekas & Kósa (1978)

	Dental Age	Skeletal Age	Sciatic notch width	Sciatic notch depth	Boucher sciatic notch index	Sciatic apertural index*	Sex estimate
HGO-14		Neonate	8 mm	3 mm	2.66	37.5	M
HGO-33	6 months	6 mths- 1 yr	6.6 mm	1.8 mm	3.66	27.27	F
HGO-09	8 years	≥ 6 years	17.8 mm	5.5 mm	3.24	30.89	M??
HGO-49		2-3 years	11.9 mm	4 mm	2.98	33.6	M
HGO-54	11-12 yrs	Middle Child	22.5 mm	6.6 mm	3.41	29.3	F??
HGO-50	12-15 yrs	♀ 12-13 yrs ♂ 14-15 yrs	19 mm	5 mm	3.8	26.32	F

* sciatic notch index utilised by Fazekas & Kósa (1978), Weaver (1980) and Mays (1998)

Sex estimates based on morphological traits

	Age group	Mandible				Pelvis				
		Chin protrusion	Anterior dental arcade	Gonial eversion	Ramus angle	Angle	Depth (morph)	Arch criterion	Iliac crest curvature	Auricular elevation
HGO-02	INF	*M*	M	M	M					
HGO-06	YC	F	*F*	*F*						
HGO-09	MC					M	M	M	M	*M*
HGO-14	NEO					F	F	F	*F*	F
HGO-33	INF	*M*	M	ind.	M	M	M	M		*M*
HGO-42	INF	F	*F*	*F*	*F*					
HGO-43	INF	*M*	M							
HGO-49	YC					F	F	F?	*F*	F
HGO-50	ADO	F	*F*	ind.	*F*	M	M	M?	M?	*M*
HGO-54	MC	F	*F*	ind.	*F*	M	M	M?	M	*M*
HGO-55	NEO	?	?	ind.	?	F	F	F?		F
HGO-57	INF	*M*	M			M	M	M		*M*

NEO= neonate, INF= infant, YC= young child, MC= middle child, ADO=adolescent (see Appendix 5)

M= male, F= female, M? = possibly male, F? = possibly female, ind. = indeterminate, ? = unknown

In italic "typical" male or female trait also present in a high proportion of the opposite sex

Appendix 10
Juvenile stature estimates

								Stature (cm)										
		Diaphyseal lengths (mm)						Fazekas	Smith			Palkama		Telkka		Virtama		Visser
Ref #	Age	humerus	radius	ulna	femur	tibia	fibula	& Kósa	F	M	?	F	M	F	M	F	M	?
HGO-14	neonate							**54**										
HGO-31	neonate		50.8		69.5			**51**										
HGO-55	neonate				74.6		60.9	**50**										
HGO-33	6 months	76										**57.5** ± 3.1	**58.3** ± 2.5					**62.9** ± 12.5
HGO-57	6 months			63.4		73.2						**56** ± 4	**55.5** ± 2.7					**65** ± 12
HGO-42	9 months			73.6		85.9						**62.4** ± 3.3	**62** ± 4					**69.5** ± 12.4
HGO-25	10 months	93				95.3								**70** ± 5	**70** ± 3			**71** ± 12
HKS-04	1 year				133.5	107								**75** ± 3	**75** ± 3			**76** ± 10
HGO-49	2-3 years	117.5	97.5	97.5										**83** ± 5	**83** ± 3			**82.3** ± 12.5
HGO-70	3 years				185				**90.8** ± 2.3	**91.4** ± 2.6	**91** ± 2.5							**91** ± 10
HKK-03	5-7 yrs	160							**101.7** ± 3.4	**101.5** ± 2.4	**101.6** ± 3			**98.6** ± 4.9	**98.6** ± 3			**102.2** ± 12.5
HKK-01	7 years	166			228.5	178			**102.6** ± 2.1	**102.4** ± 1.77	**102.5** ± 1.97			**100** ± 5	**100** ± 3			**104** ± 9
HGO-54	11-12 yrs	219			325	254			**130.5** ± 2.1	**130** ± 1.77	**130** ± 1.97					**131** ± 5	**128** ± 5	**130** ± 10
HGO-50	12-15 yrs		158						**126.8** ± 3.2	**124.9** ± 2.75	**125.9** ± 3.2					**127.7** ± 4.7	**124.7** ± 4.6	

Data and table from the author

Equations used to estimate height from Palkama *et al.* 1962; Telkkä *et al.* 1962; Virtama *et al.* 1962; Fazekas & Kósa 1978; Visser 1998; Smith 2007

Appendix 11
Adult sex estimates from skull and pelvis standard morphological traits

Early Neolithic Körös Culture

Reference	Skull					Pelvis				Sex	
Ref #	Nuchal crest	Mastoid process	Supra-orbital margin	Glabella	Mental eminence	Greater sciatic notch	Shape of pubis*	Pre-auricular sulcus	Overall shape	Average	Sex
DOL - 01	2.5	1.0	2.0	1.5	1.5	2.0	1.0	1.0	1.0	1.5	F
DOL - 02	3.0	2.5	2.0	2.0	3.0					2.5	F?
HBP - 01	5.0	4.5	4.0	5.0						4.6	M
HKJ - 01	2.5	3.0	3.5	3.0	3.5					3.1	M??
HKO - 01	4.5	4.5	4.5	4.5						4.5	M
HKO - 02			3.0	4.0	3.0					3.3	M??
HKO - 03	1.0	1.0	1.0	1.0						1.0	F
HKO - 04	3.0	3.0	3.0	1.0						2.5	F?
HKO - 05	2.5	4.0	2.5	3.5	3.0					3.1	M??
HKO - 06	4.0	3.5	5.0	4.5						4.3	M
HKO - 07			1.5	1.5	2.0					1.7	F
HKO - 08		4.5	3.0							3.8	M?

F= 1.0-1.9 F?= 2.0-2.5 F??= 2.6-2.9 M/F= 3 M??= 3.1-3.4 M?= 3.5-4.0 M= 4.1-5.0

** includes sub-pubic angle, ventral arc, sub-pubic concavity and ischiopubic ramus*

Unspecified Neolithic

Reference	Skull					Pelvis				Sex	
Ref #	Nuchal crest	Mastoid process	Supra-orbital margin	Glabella	Mental eminence	Greater sciatic notch	Shape of pubis*	Pre-auricular sulcus	Overall shape	Average	Sex
HZB - 01		2.0	3.0	3.0						2.7	F??
OSZ - 01		3.0	2.0	2.0						2.3	F?

F= 1.0-1.9 F?= 2.0-2.5 F??= 2.6-2.9 M/F= 3 M??= 3.1-3.4 M?= 3.5-4.0 M= 4.1-5.0

** includes sub-pubic angle, ventral arc, sub-pubic concavity and ischiopubic ramus*

Late Neolithic Tisza Culture

Reference	Skull					Pelvis				Sex	
Ref #	Nuchal crest	Mastoid process	Supra-orbital margin	Glabella	Mental eminence	Greater sciatic notch	Shape of pubis*	Pre-auricular sulcus	Overall shape	Average	Sex
BKP - 01					3.5	5.0	5.0	5.0		4.7	M
BKP - 02	3.0	3.0	4.5	4.0	4.5	5.0				4.0	M?
BKP - 03	1.0	3.0	1.5	1.5	3.0					2.0	F?
BKP - 04	3.5	3.5	3.0		4.0	5.0	5.0	5.0		4.1	M
BKP - 05		4.5	5.0	5.0	5.0	4.0	5.0			4.8	M
DOR - 01	5.0	5.0	4.5	4.5	4.0					4.6	M
HGO - 01		3.5								3.5	M?
HGO - 04		2.5	2.0	1.5		1.5		1.0		1.7	F
HGO - 05	1.0	1.0	1.5	1.0	1.0	1.0			1.0	1.1	F
HGO - 08	1.0	1.5	1.0	1.0	2.0	4.5	3.5	2.5	3.0	2.2	F?
HGO - 10		4.0				4.0		5.0	5.0	4.5	M
HGO - 12	3.0	1.5	2.0	2.0	1.5	1.5	2.0	1.0		1.8	F
HGO - 15		4.0	4.0	4.0	5.0					4.3	M
HGO - 17		4.0	4.5	4.5			5.0			4.5	M
HGO - 19	1.0	1.0	2.5	1.0	1.5	3.0	1.0	1.0	1.0	1.3	F
HGO - 21	3.0	1.0	2.0	1.0	3.0	1.5	1.0	1.0	1.0	1.6	F
HGO - 22		5.0	5.0	4.0	4.5	5.0	5.0	5.0	5.0	4.8	M
HGO - 23		1.0	2.0	1.0	2.0	3.5	3.0		3.0	2.2	F?
HGO - 24	2.0				3.0	1.5	1.0			1.9	F
HGO - 26		3.0	2.5			2.0	1.0	1.0	1.0	1.8	F
HGO - 27		5.0				4.0	5.0		2.0	4.0	M?
HGO - 28	3.0	1.5	2.0	1.0		4.0		5.0		4.0	F?
HGO - 30		2.5	2.0	1.5		1.0	1.0	1.0	1.0	1.4	F
HGO - 34	1.5	1.0	1.0	1.0	1.0	1.0			1.0	1.1	F
HGO - 35	1.5	2.5	3.0	3.0	1.5	1.0		1.0	1.0	1.8	F
HGO - 38	2.5	3.0	3.5	3.0		1.0	1.0	1.0	1.0	2.0	F?
HGO - 39	1.0	1.0	2.0		2.5	1.5		1.0	1.0	1.4	F
HGO - 40		2.0	3.0		1.0					2.0	F?
HGO - 41	4.0	5.0	4.5	4.0	4.0	4.0				4.3	M
HGO - 44	2.0	3.0	2.0	3.0						2.5	F?
HGO - 46	1.5				2.5	1.0			1.0	1.5	F
HGO - 48	2.5	1.0	1.0	1.0	1.0					1.3	F
HGO - 51	3.5	3.0	2.0	3.5	3.0					3.0	M/F
HGO - 52	4.5	4.0	4.5	3.0	4.5					4.1	M
HGO - 53	4.5	4.0	2.0	3.0	4.0	4.0		5.0		3.8	M?
HGO - 56	2.0	3.5	1.5	3.5	3.0	2.0		5.0		2.9	F??
HGO - 68					4.0					4.0	M?
HGO - 84			4.0	4.0						4.0	M?
HKK - 04	4.0	4.0	3.0	3.0	4.0	4.0				3.7	M?
HKS - 01		2.0	2.0	1.5						1.8	F
HKS - 02	2.5	3.5	3.0	2.5	3.5					3.0	M/F
HKS - 03		5.0	4.5	4.0	4.5					4.5	M
HKV - 01	4.0	2.5	3.5	3.5	3.5					3.4	M??

F= 1.0-1.9 F?= 2.0-2.5 F??= 2.6-2.9 M/F= 3 M??= 3.1-3.4 M?= 3.5-4.0 M= 4.1-5.0

** includes sub-pubic angle, ventral arc, sub-pubic concavity and ischiopubic ramus*

Appendix 12
Adult sex estimates
from alternative morphological traits

Culture	Ref #	Sex*	Mandible		Distal Humerus								Pelvis								Sacrum
			Ramus		Fossa		Epicondyle		Trochlear				Composite								
			Flexure		shape		angle		constriction		symmetry		Arch		proportion		symmetry		AP line		
			L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	Shape
Körös	HKJ-01	M??		M																	
	HKO-02	M??	F	F																	
	HKO-05	M??	M	M																	
	DOL-01	F			F	F	M	M	M/F	M/F	M	F?	F	M	F	M	M/F	M	F	M	
	HKO-07	F	F	F																	
	DOL-02	F?	F	F	F	M	F	F	M/F	M/F	F	F									
Tisza	BKP-01	M			M	M	M	M	M	M	M/F	M/F	M	M	M	M	M	M	M	M	M
	BKP-04	M				F		F		F		F	M	M	M	M	M	M	M	M	
	BKP-05	M			F		M	F	M		M?		M		M		M		M/F		
	DOR-01	M	M																		
	HGO-10	M	M		M	M	M		M/F	M/F	F	F									
	HGO-15	M		M																	
	HGO-17	M				M		F		M		M		M							
	HGO-22	M	M		F	F	M		M		M		M	M	M	M	M	M	M	M	
	HGO-41	M	M	M	M									F		M		M/F		M/F	
	HGO-52	M	M	M																	
	BKP-02	M?	F		M	M	M	M	M	M	M	M		F	M	M	M	M	M	M	
	HGO-01	M?			F	F		M		M		M									
	HGO-27	M?		M	F	F	M	M	?	F?	M/F	F?	M	M	M	M	M	M	M/F	M/F	F
	HGO-53	M?	M?	M	M	M	F		M	M	M/F	M?	M	M	M	M	M	M	M	M	
	HKS-02	M/F	M	M																	
	HGO-51	M/F																			
	HGO-04	F				M		M		M		M		F							
	HGO-05	F		M?	F	F	F	F	M/F	M/F	F?	F?	M?	F?	F	F	M	F	F	F	F
	HGO-12	F		F	F	F	F	F	M/F	M/F	F?	F?	?								F
	HGO-19	F		M		M		M		M		M	M?	F	M	M	M	M		F	F
	HGO-21	F	F	F		M				F		F	M	M	F	F	M/F	M/F	F	F	
	HGO-24	F		F	F	F		F	M/F	M/F	F?	F?	M	M	F	F	F	F	F	F	
	HGO-26	F		M	M	M	F	M	M/F	M?	F	F	M	M?	M	M	M/F	M	F	M	
	HGO-34	F	F		M	M	F			M/F		F?	F	F	F	F	M	M	F	F	
	HGO-35	F	F	F	M	M	M	M	M	M	M	M	M?	M	M	F	F	M/F	M/F	M	M
	HGO-39	F	M		M	M	F		M?	M?	M?	M?	F	F	F	F	F	F	F	F	
	HGO-46	F	F		F	M	F	F		M/F		M/F	M	F	F	F	M/F	F	F	F	F
	HGO-48	F		F	F	F	F	F	F	F	F	F									
	BKP-03	F?	F	F	F	F	F	F	M	M	M	M									
	HGO-08	F?	F	F	M	M	F	F	M	M	M	M?	M	M	M	M	M	M	M	M	
	HGO-23	F?		F									M?		M	M	M/F	M		M	
	HGO-28	F?	F?		F		F		M/F		M/F			M							
	HGO-38	F?		F	M	M	F	F	M?	M?	M?	M?	F		F		F		F		
	HGO-40	F?		?	M				F		F										
	HGO-56	F??	F	F	M	M		F	M	M	M/F	M?		F		F		F		F	M/F
	HGO-76	?					F		M/F		M/F										

Mandible ramus flexure trait from Loth and Henneberg (1996)
Distal humerus traits from Falys *et al.* (2005)
Pelvis traits from Bruzek (2002)
Sacrum shape as described in 2.3.3

*** sex estimated from standard skull and pelvic morphological traits, see Appendix 11**

Appendix 13
Statistical significance of mandibular ramus flexure as a sexing trait

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex * MandRamFlex	31	77.5%	9	22.5%	40	100.0%

Sex * MandRamFlex Crosstabulation

			MandRamFlex		Total
			Female	Male	Female
Sex	Female	Count	15	4	19
		% within Sex	78.9%	21.1%	100.0%
		% within MandRamFlex	88.2%	28.6%	61.3%
		% of Total	48.4%	12.9%	61.3%
	Male	Count	2	10	12
		% within Sex	16.7%	83.3%	100.0%
		% within MandRamFlex	11.8%	71.4%	38.7%
		% of Total	6.5%	32.3%	38.7%
	Total	Count	17	14	31
		% within Sex	54.8%	45.2%	100.0%
		% within MandRamFlex	100.0%	100.0%	100.0%
		% of Total	54.8%	45.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.519(b)	1	.001		
Continuity Correction(a)	9.142	1	.002		
Likelihood Ratio	12.314	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	11.148	1	.001		
N of Valid Cases	31				

a Computed only for a 2x2 table
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.42.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.610	.001
	Cramer's V	.610	.001
N of Valid Cases		31	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Appendix 14
Statistical significance of distal humerus sexing traits

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex * DistHumFossaShape	31	77.5%	9	22.5%	40	100.0%
Sex * DistHumEpiAngle	28	70.0%	12	30.0%	40	100.0%
Sex * DistHumTrochConstriction	30	75.0%	10	25.0%	40	100.0%
Sex * DistHumTrochSymmetry	30	75.0%	10	25.0%	40	100.0%

Distal Humerus Fossa Shape

Crosstab

			DistHumFossaShape			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	7	11	2	20
		% within Sex	35.0%	55.0%	10.0%	100.0%
		% within DistHumFossaShape	58.3%	64.7%	100.0%	64.5%
		% of Total	22.6%	35.5%	6.5%	64.5%
	Male	Count	5	6	0	11
		% within Sex	45.5%	54.5%	.0%	100.0%
		% within DistHumFossaShape	41.7%	35.3%	.0%	35.5%
		% of Total	16.1%	19.4%	.0%	35.5%
	Total	Count	12	17	2	31
		% within Sex	38.7%	54.8%	6.5%	100.0%
		% within DistHumFossaShape	100.0%	100.0%	100.0%	100.0%
		% of Total	38.7%	54.8%	6.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.301(a)	2	.522
Likelihood Ratio	1.949	2	.377
Linear-by-Linear Association	1.254	1	.263
N of Valid Cases	31		

a 3 cells (50.0%) have expected count less than 5. The minimum expected count is .71.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.205	.522
	Cramer's V	.205	.522
N of Valid Cases		31	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Distal Humerus Epicondyle Angle

Crosstab

			DistHumEpiAngle			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	13	4	1	18
		% within Sex	72.2%	22.2%	5.6%	100.0%
		% within DistHumEpiAngle	81.3%	40.0%	50.0%	64.3%
		% of Total	46.4%	14.3%	3.6%	64.3%
	Male	Count	3	6	1	10
		% within Sex	30.0%	60.0%	10.0%	100.0%
		% within DistHumEpiAngle	18.8%	60.0%	50.0%	35.7%
		% of Total	10.7%	21.4%	3.6%	35.7%
Total		Count	16	10	2	28
		% within Sex	57.1%	35.7%	7.1%	100.0%
		% within DistHumEpiAngle	100.0%	100.0%	100.0%	100.0%
		% of Total	57.1%	35.7%	7.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.752(a)	2	.093
Likelihood Ratio	4.823	2	.090
Linear-by-Linear Association	.820	1	.365
N of Valid Cases	28		

a 3 cells (50.0%) have expected count less than 5. The minimum expected count is .71.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.412	.093
	Cramer's V	.412	.093
N of Valid Cases		28	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Crosstab

			DistHumTrochConstriction			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	3	8	9	20
		% within Sex	15.0%	40.0%	45.0%	100.0%
		% within DistHumTrochConstriction	60.0%	53.3%	90.0%	66.7%
		% of Total	10.0%	26.7%	30.0%	66.7%
	Male	Count	2	7	1	10
		% within Sex	20.0%	70.0%	10.0%	100.0%
		% within DistHumTrochConstriction	40.0%	46.7%	10.0%	33.3%
		% of Total	6.7%	23.3%	3.3%	33.3%
Total		Count	5	15	10	30
		% within Sex	16.7%	50.0%	33.3%	100.0%
		% within DistHumTrochConstriction	100.0%	100.0%	100.0%	100.0%
		% of Total	16.7%	50.0%	33.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.750(a)	2	.153
Likelihood Ratio	4.231	2	.121
Linear-by-Linear Association	3.412	1	.065
N of Valid Cases	30		

a 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.67.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.354	.153
	Cramer's V	.354	.153
N of Valid Cases		30	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Distal Humerus Trochlear Symmetry

Crosstab

			DistHumTrochSymmetry			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	9	7	4	20
		% within Sex	45.0%	35.0%	20.0%	100.0%
		% within DistHumTrochSymmetry	81.8%	58.3%	57.1%	66.7%
		% of Total	30.0%	23.3%	13.3%	66.7%
	Male	Count	2	5	3	10
		% within Sex	20.0%	50.0%	30.0%	100.0%
		% within DistHumTrochSymmetry	18.2%	41.7%	42.9%	33.3%
		% of Total	6.7%	16.7%	10.0%	33.3%
	Total	Count	11	12	7	30
		% within Sex	36.7%	40.0%	23.3%	100.0%
		% within DistHumTrochSymmetry	100.0%	100.0%	100.0%	100.0%
		% of Total	36.7%	40.0%	23.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.797(a)	2	.407
Likelihood Ratio	1.898	2	.387
Linear-by-Linear Association	.570	1	.450
N of Valid Cases	30		

a 4 cells (66.7%) have expected count less than 5. The minimum expected count is 2.33.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.245	.407
	Cramer's V	.245	.407
N of Valid Cases		30	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Appendix 15
Statistical significance of pelvic additional sexing traits

Pelvic Composite Arch

			PelvCompArch			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	5	8	3	16
		% within Sex	31.3%	50.0%	18.8%	100.0%
		% within PelvCompArch	71.4%	53.3%	100.0%	64.0%
		% of Total	20.0%	32.0%	12.0%	64.0%
	Male	Count	2	7	0	9
		% within Sex	22.2%	77.8%	.0%	100.0%
		% within PelvCompArch	28.6%	46.7%	.0%	36.0%
		% of Total	8.0%	28.0%	.0%	36.0%
Total		Count	7	15	3	25
		% within Sex	28.0%	60.0%	12.0%	100.0%
		% within PelvCompArch	100.0%	100.0%	100.0%	100.0%
		% of Total	28.0%	60.0%	12.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.596(a)	2	.273
Likelihood Ratio	3.567	2	.168
Linear-by-Linear Association	1.413	1	.235
N of Valid Cases	25		

a 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.08.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.322	.273
	Cramer's V	.322	.273
N of Valid Cases		25	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Fisher's Exact Tests with indeterminate individuals excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.646(b)	1	.421		
Continuity Correction(a)	.115	1	.735		
Likelihood Ratio	.664	1	.415		
Fisher's Exact Test				.648	.372
Linear-by-Linear Association	.617	1	.432		
N of Valid Cases	22				

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.86.

Sciatic Notch Proportion

			SciNotchProportion			Total
			Female	Male	indeterminate	Female
Sex	Female	Count	9	2	3	14
		% within Sex	64.3%	14.3%	21.4%	100.0%
		% within SciNotchProportion	100.0%	20.0%	100.0%	63.6%
		% of Total	40.9%	9.1%	13.6%	63.6%
	Male	Count	0	8	0	8
		% within Sex	.0%	100.0%	.0%	100.0%
		% within SciNotchProportion	.0%	80.0%	.0%	36.4%
		% of Total	.0%	36.4%	.0%	36.4%
Total		Count	9	10	3	22
		% within Sex	40.9%	45.5%	13.6%	100.0%
		% within SciNotchProportion	100.0%	100.0%	100.0%	100.0%
		% of Total	40.9%	45.5%	13.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.086(a)	2	.001
Likelihood Ratio	18.833	2	.000
Linear-by-Linear Association	.526	1	.468
N of Valid Cases	22		

a 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.09.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.828	.001
	Cramer's V	.828	.001
N of Valid Cases		22	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Fisher's Exact Tests with indeterminate individuals excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.436(b)	1	.000		
Continuity Correction(a)	9.371	1	.002		
Likelihood Ratio	15.856	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	11.782	1	.001		
N of Valid Cases	19				

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.79.

Sciatic Notch Symmetry

			SciNotchSymmetry			Total
			Female	Male	Indeterminate	Female
Sex	Female	Count	4	3	7	14
		% within Sex	28.6%	21.4%	50.0%	100.0%
		% within SciNotchSymmetry	100.0%	30.0%	87.5%	63.6%
		% of Total	18.2%	13.6%	31.8%	63.6%
	Male	Count	0	7	1	8
		% within Sex	.0%	87.5%	12.5%	100.0%
		% within SciNotchSymmetry	.0%	70.0%	12.5%	36.4%
		% of Total	.0%	31.8%	4.5%	36.4%
Total		Count	4	10	8	22
		% within Sex	18.2%	45.5%	36.4%	100.0%
		% within SciNotchSymmetry	100.0%	100.0%	100.0%	100.0%
		% of Total	18.2%	45.5%	36.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.144(a)	2	.010
Likelihood Ratio	10.596	2	.005
Linear-by-Linear Association	2.142	1	.143
N of Valid Cases	22		

a 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.45.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.645	.010
	Cramer's V	.645	.010
N of Valid Cases		22	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Fisher's Exact Tests with indeterminate individuals excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.600(b)	1	.018		
Continuity Correction(a)	3.150	1	.076		
Likelihood Ratio	7.191	1	.007		
Fisher's Exact Test				.070	.035
Linear-by-Linear Association	5.200	1	.023		
N of Valid Cases	14				

a Computed only for a 2x2 table

b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.00.

Sciatic Notch crossing AP line

			SciNotchAP			Total
			Female	Male	indeterminate	Female
Sex	Female	Count	9	3	2	14
		% within Sex	64.3%	21.4%	14.3%	100.0%
		% within SciNotchAP	100.0%	37.5%	40.0%	63.6%
		% of Total	40.9%	13.6%	9.1%	63.6%
	Male	Count	0	5	3	8
		% within Sex	.0%	62.5%	37.5%	100.0%
		% within SciNotchAP	.0%	62.5%	60.0%	36.4%
		% of Total	.0%	22.7%	13.6%	36.4%
Total		Count	9	8	5	22
		% within Sex	40.9%	36.4%	22.7%	100.0%
		% within SciNotchAP	100.0%	100.0%	100.0%	100.0%
		% of Total	40.9%	36.4%	22.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.712(a)	2	.013
Likelihood Ratio	11.526	2	.003
Linear-by-Linear Association	2.463	1	.117
N of Valid Cases	22		

a 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.82.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.629	.013
	Cramer's V	.629	.013
N of Valid Cases		22	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Fisher's Exact Tests with indeterminate individuals excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.969(b)	1	.005		
Continuity Correction(a)	5.243	1	.022		
Likelihood Ratio	10.012	1	.002		
Fisher's Exact Test				.009	.009
Linear-by-Linear Association	7.500	1	.006		
N of Valid Cases	17				

a Computed only for a 2x2 table
b 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.35.

Appendix 16
Measurements of sexed individuals

All in mm apart from indices (percentages) and gonial angle (degrees)

Ref #	Sex	Skull													
		Max. length	Max. breadth	Max. height	*Cranial index*	*Cranial length-height index*	*Breadth- height index*	Min. frontal breadth	*Fronto-parietal index*	Mastoid length	Total facial height	Upper facial height	Facial width (bizygomatic breadth)	*Total facial index*	*Upper facial index*
DOL-01	F	178.0	133.0	130.0	*74.7*	*73.0*	*97.7*	89.0	*66.9*		113.0	66.0	116.5	*97.0*	*56.7*
DOL-02	F	177.0	138.0		*78.0*			96.0	*69.6*	31.0	118.0	69.0	123.5	*98.5*	*55.9*
HBP-01	M	182.0	141.0		*77.5*			100.0	*70.9*	27.0					
HKJ-01	M	175.0	141.0	127.0	*80.6*	*72.6*	*90.1*			28.0					
HKO-01	M	197.0	146.0		*74.1*			105.0	*71.9*	26.0					
HKO-02	M							98.5				67.0			
HKO-03	F	182.0	144.0		*79.1*			94.0	*65.3*	25.0					
HKO-04	F	177.0	136.0		*76.8*			91.5	*67.3*	30.0					
HKO-05	M	185.0	139.0		*75.1*			90.0	*64.7*	35.0					
HKO-06	M	188.0	130.0		*69.1*			97.0	*74.6*	30.0		74.5	118.0		
HKO-07	F							99.0							
BKP-01	M														
BKP-02	M	194.0	151.0		*77.8*			106.0	*70.2*	32.0		64.5			
BKP-03	F	184.0	133.0	135.0	*72.3*	*73.4*	*101.5*			32.5		65.5			
BKP-04	M	177.0	135.0		*76.3*			96.5	*71.5*	32.3					
BKP-05	M									37.6					
DOR-01	M												150.0		
HGO-01	M														
HGO-04	F														
HGO-05	F	175.0	138.0	132.0	*78.9*	*75.4*	*95.7*	93.0	*67.4*	29.8		68.0			
HGO-08	F	181.0	134.0	139.0	*74.0*	*76.8*	*76.8*	94.0	*70.1*	30.0	109.0	62.0	115.0	*94.8*	*53.9*
HGO-10	M									38.6					
HGO-12	F							94.0		27.2					
HGO-15	M									33.2					
HGO-17	M							101.0				67.0			
HGO-19	F							89.0		28.4		58.0			
HGO-21	F			140.0						27.5	114.0	66.0			
HGO-22	M											70.0			
HGO-23	F							89.0		25.9	94.0	52.0			
HGO-24	F	188.0	125.0		*66.5*										
HGO-26	F									33.0					
HGO-27	M									36.5					
HGO-28	F	184.0	127.0		*69.0*					28.2					
HGO-30	F							97.3		31.0					
HGO-34	F	168.0	135.0		*80.4*			97.3	*72.1*	29.4			118.0		
HGO-35	F							90.0		32.3					
HGO-38	F							96.6		32.5					
HGO-39	F									28.8					
HGO-40	F									33.0					
HGO-41	M	190.0	130.0	152.0	*68.4*	*80.0*	*116.9*	95.4	*73.4*	37.3	115.9	65.9			
HGO-44	F	177.0	124.0		*70.1*			90.6	*73.1*	32.0		61.3			
HGO-46	F														
HGO-48	F									28.7					
HGO-52	M	190.0	129.0	143.0	*67.9*	*75.3*	*110.9*			31.9					
HGO-53	M	180.0	131.0		*72.8*			93.1	*71.1*	30.8					
HGO-56	F	182.0	134.0	140.0	*73.6*	*76.9*	*104.5*	90.6	*67.6*			68.6			
HKK-04	M	189.0						99.5							
HKS-01	F														
HKS-03	M							99.5		26.0		73.0			
HKV-01	M	184.0	133.0	145.0	*72.3*	*78.8*	*109.0*	99.5	*74.8*						
HZB-01	F		148.0	138.0			*93.2*	104.0	*70.3*				135.0		
OSZ-01	F	178.0	126.0		*70.8*			93.0	*73.8*						

Ref #	Sex	Skull											
		Nasal height	Nasal breadth	*Nasal index*	Orbital height	Orbital breadth	*Orbital index*	Maxilloalveolar length	Maxilloalveolar breadth	*Maxillo-alveolar index*	Palatal length	Palatal breadth	*Palatal index*
DOL-01	F	49.0	23.5	*48.0*	34.0	35.0	*97.1*	53.0	57.0	*107.5*	42.0	33.0	*78.6*
DOL-02	F	51.0	24.0	*47.1*	29.0	38.0	*76.3*	51.5	65.0	*126.2*	43.0	40.0	*93.0*
HBP-01	M												
HKJ-01	M								64.0			39.0	
HKO-01	M												
HKO-02	M	48.0	24.0	*50.0*	31.5	37.5	*84.0*	55.0	67.0	*121.8*		39.0	
HKO-03	F												
HKO-04	F												
HKO-05	M												
HKO-06	M	54.0	24.0	*44.4*	33.0	38.0	*86.8*	51.0	59.0	*115.7*	41.0	36.0	*87.8*
HKO-07	F	45.5	25.5	*56.0*	30.5	38.5	*79.2*						
BKP-01	M												
BKP-02	M	48.0	26.0	*54.2*				53.0	63.0	*118.9*	44.0	37.0	*84.1*
BKP-03	F	49.5	22.5	*45.5*	33.5						45.0		
BKP-04	M								65.5			38.0	
BKP-05	M												
DOR-01	M												
HGO-01	M												
HGO-04	F												
HGO-05	F	45.0	22.5	*50.0*	33.0	37.0	*89.2*	47.0	59.0	*125.5*	40.0	35.0	*87.5*
HGO-08	F	45.0	24.0	*53.3*	30.0	36.0	*83.3*	54.0	61.0	*113.0*	38.0	34.0	*89.5*
HGO-10	M												
HGO-12	F												
HGO-15	M		23.0					58.0	58.5	*100.9*	48.0	33.0	*68.8*
HGO-17	M	52.0	24.0	*46.2*	31.0	38.0	*81.6*	47.5	62.0	*130.5*		35.0	
HGO-19	F	42.5	25.0	*58.8*	29.0	36.0	*80.6*	54.0			45.0	34.0	*75.6*
HGO-21	F	45.0	22.0	*48.9*	30.5	34.0	*89.7*	54.0	62.0	*114.8*	39.0	34.0	*87.2*
HGO-22	M	50.0	25.0	*50.0*	32.0	38.0	*84.2*	52.5	66.0	*125.7*		36.5	
HGO-23	F	39.0	19.0	*48.7*	26.0	34.0	*76.5*	45.0	56.0	*124.4*		32.0	
HGO-24	F							52.0					
HGO-26	F												
HGO-27	M												
HGO-28	F												
HGO-30	F												
HGO-34	F				25.0	38.6	*64.8*						
HGO-35	F												
HGO-38	F												
HGO-39	F												
HGO-40	F												
HGO-41	M	50.0	24.9	*49.8*	31.2	39.4	*79.2*						
HGO-44	F	42.9			30.0	36.2	*82.9*	47.9	61.0	*127.3*		34.6	
HGO-46	F												
HGO-48	F												
HGO-52	M								62.0		43.8	35.6	*81.3*
HGO-53	M	47.1	23.9	*50.7*	29.8	41.6	*71.6*		60.6		44.3	35.9	*81.0*
HGO-56	F	49.2	25.7	*52.2*	33.8	41.4	*81.6*	55.0					
HKK-04	M				30.0	36.0	*83.3*				42.0	36.0	*85.7*
HKS-01	F												
HKS-03	M	56.0	27.5	*49.1*	33.5						44.0	39.0	*88.6*
HKV-01	M	47.0			24.0	35.0	*68.6*						
HZB-01	F	49.0	26.0	*53.1*	31.0	38.0	*81.6*	60.5	50.0	*82.6*	41.5	37.0	*89.2*
OSZ-01	F							62.0	53.5	*86.3*		37.5	

Ref #	Sex	Mandible								Sternum			Clavicle			
		Max. length	Bicondylar breadth	Bigonial breadth	Height of ramus	Ramus min. breadth	Symphysis height	Gonial angle	Condylar width	Manubrium length	Body length	*Sternum index*	Max. length	Midshaft circumference	*Robustness index*	*Clavicular-humeral index*
DOL-01	F	75.0	107.0	96.0	57.0	35.0	33.0	127.0	18.0		99.0		147.5	36.0	*24.4*	*49.4*
DOL-02	F	71.5	115.0	97.0	58.0	31.0	33.5	130.0	19.8				126.0	36.0	*28.6*	*46.8*
HBP-01	M															
HKJ-01	M	73.5	130.0	100.0	58.0	31.5	35.5	128.0	19.0							
HKO-01	M															
HKO-02	M	79.0	124.0	101.5	60.0	35.0	33.5	118.5	20.5							
HKO-03	F															
HKO-04	F															
HKO-05	M	79.0	119.0	91.0	67.0	33.5		110.0	24.0							
HKO-06	M															
HKO-07	F	73.5		91.0	52.0	30.0	23.0	120.0	17.5							
BKP-01	M						35.0			53.0			160.5	39.5	*24.6*	*49.3*
BKP-02	M	78.0		107.0		34.5	30.0	115.0		54.0			154.0	43.0	*27.9*	*45.6*
BKP-03	F				57.0	31.0		112.0	20.0		90.0		135.0			*44.7*
BKP-04	M					34.0			20.0					40.0		
BKP-05	M						31.5			57.0			148.0	45.0	*30.4*	*44.8*
DOR-01	M	80.0				30.5		147.0								
HGO-01	M															
HGO-04	F					31.0	32.0									
HGO-05	F	74.0			47.5	31.0		130.0	17.5	38.6	85.0	*45.4*	126.8	35.0	*27.6*	*42.8*
HGO-08	F					30.0	30.0	130.0	17.0	43.0	77.0	*55.8*	141.0	38.5	*27.3*	*45.6*
HGO-10	M	82.5								52.0						
HGO-12	F	70.0		87.5	51.0	30.0		130.0	20.5							
HGO-15	M	77.0				33.0	36.0	112.0								
HGO-17	M					31.0							143.0			*47.5*
HGO-19	F	77.0		90.0	53.0	33.5	33.5	125.0	21.0				123.0	34.0	*27.6*	*43.3*
HGO-21	F	75.5		98.0	53.0	33.0	35.0	121.0	17.5					35.0		
HGO-22	M	78.0			63.0	31.0		118.0						39.5		
HGO-23	F	77.0			50.0	31.0	26.0	120.0								
HGO-24	F					28.0										
HGO-26	F	75.0			52.0	32.0	34.3	130.0								
HGO-27	M	72.5			53.0	29.5		126.0								
HGO-28	F															
HGO-30	F										101.6					
HGO-34	F	69.0			47.0	27.6		129.0	19.6	52.0			135.5	36.5	*26.9*	*55.1*
HGO-35	F	72.0			53.0	33.3	26.8	125.0					128.5	39.0	*30.4*	*44.7*
HGO-38	F					32.3							129.0	35.0	*27.1*	*44.9*
HGO-39	F	70.0		91.0	58.0	31.8		119.0	17.2				128.0			*44.6*
HGO-40	F	61.0						126.0								
HGO-41	M	81.0			59.0	33.7	33.0	122.0	22.0							
HGO-44	F															
HGO-46	F	73.0			50.0	26.6	35.7	127.5								
HGO-48	F	72.0				30.2							121.0	35.0	*28.9*	*48.2*
HGO-52	M	84.0			67.0	37.0	37.0	109.0						37.0		
HGO-53	M					32.7	33.7							35.0		
HGO-56	F				61.2	30.1	34.2	111.0	20.6	47.0			137.0	40.0	*29.2*	*46.1*
HKK-04	M				55.0	32.0		130.0								
HKS-01	F				53.0	25.0		137.0								
HKS-03	M	83.0			57.0	29.0		134.0	22.0							
HKV-01	M	72.0	112.0	95.0	52.0	32.0	29.5	118.0								
HZB-01	F															
OSZ-01	F															

Ref #	Sex	Clavicle		Scapula					Humerus							
		Midshaft max. diamater	Midshaft min. diameter	Max. length	Max. breadth	*Scapular index*	Spine length	Glenoid cavity length	Vertical head diameter	Max. length	Midshaft circumference	*Robustness index*	Midshaft min. diameter	Midshaft max. diameter	Epicondylar width	*Radiohumeral index*
DOL-01	F				102.0			37.0	41.0	298.5	58.0	*19.4*	16.0	20.0	61.0	*78.4*
DOL-02	F	11.8						34.0	39.0	269.0			14.0	18.5	53.0	*78.4*
HBP-01	M															
HKJ-01	M															
HKO-01	M															
HKO-02	M															
HKO-03	F															
HKO-04	F															
HKO-05	M															
HKO-06	M															
HKO-07	F															
BKP-01	M	12.0						40.0	51.0	325.8	68.5	*21.0*	19.3	21.3	70.8	*77.0*
BKP-02	M			173.0	118.0	*68.2*	154.0	42.3	49.5	337.5	70.0	*20.7*	18.0	24.0	66.0	*74.2*
BKP-03	F							34.0	43.5	302.0	68.0	*22.5*	15.5	22.0	55.0	*74.8*
BKP-04	M			143.0	105.0	*73.4*	140.0	39.0	44.0	328.0			20.0	22.0	58.0	
BKP-05	M							42.0	51.5	330.0			19.5	23.0	66.5	*76.1*
DOR-01	M												19.0			
HGO-01	M								44.8				17.5	17.9		
HGO-04	F						123.6		41.1						58.1	
HGO-05	F							34.0	38.2	296.0			17.1	17.2	55.3	*75.3*
HGO-08	F							38.5	39.0	309.0	60.0	*19.4*	17.5	18.5	59.5	
HGO-10	M							42.0	49.0	312.0	66.0	*21.2*	19.0	20.0	62.0	
HGO-12	F			122.0				34.3	40.4	278.0			16.7	17.0	52.8	*72.7*
HGO-15	M															
HGO-17	M							41.6	44.7	301.0						*78.1*
HGO-19	F	11.4	8.9					33.9	39.9	284.0			18.4	19.0	54.7	
HGO-21	F							34.4	39.1	282.0	64.0	*22.7*	20.1	21.3		*75.9*
HGO-22	M							39.1	44.8	324.0	70.0	*21.6*	21.6	21.9	65.6	
HGO-23	F															
HGO-24	F						124.0	35.0	40.5	296.0	60.0	*20.3*	19.0	20.5		
HGO-26	F														56.0	
HGO-27	M							36.0	39.0	290.0	58.0	*20.0*	18.0	19.5	60.0	*73.6*
HGO-28	F														53.0	
HGO-30	F								38.2				18.2	21.5		
HGO-34	F							33.5	37.0	246.0	58.0	*23.6*	17.3	18.3		*78.6*
HGO-35	F							35.2	39.0	287.5	60.0	*20.9*	17.9	19.7	56.0	*72.0*
HGO-38	F				126.0			36.2	41.0	287.5	58.5	*20.3*	18.6	19.4	58.2	*76.5*
HGO-39	F							33.0	38.3	287.0	58.0	*20.2*	19.0	16.5	56.8	*73.9*
HGO-40	F							36.0	40.4	295.0						*82.0*
HGO-41	M							38.4	46.0				22.0	23.2		
HGO-44	F															
HGO-46	F							31.6		259.0			14.6	18.0	55.7	*79.9*
HGO-48	F							32.0	34.2	251.0			15.9	17.4	52.0	*73.5*
HGO-52	M							38.0								
HGO-53	M	11.2	10.1										19.6	20.7	63.4	
HGO-56	F							35.0	41.2	297.0	63.0	*21.2*	20.9	21.9	53.6	*76.8*
HKK-04	M	11.5							48.0	342.0	62.0	*18.1*		22.0	64.5	*77.2*
HKS-01	F															
HKS-03	M															
HKV-01	M															
HZB-01	F															
OSZ-01	F															

Ref #	Sex	Radius					Ulna					
		Head max. diameter	Max. length	Midshaft M/L diameter	Midshaft A/P diameter	Distal breadth	Max. length	Midshaft circumference	Midshaft M/L diameter	Midshaft A/P diameter	Prox.ulna inf. medial trochlear notch length	Prox.ulna inf. medial trochlear notch width
DOL-01	F		234.0	13.5	9.5		260.5	43.0			15.8	14.2
DOL-02	F	19.5	211.0	14.3			224.0		14.5		14.9	12.9
HBP-01	M											
HKJ-01	M											
HKO-01	M											
HKO-02	M											
HKO-03	F											
HKO-04	F										15.0	
HKO-05	M											
HKO-06	M											
HKO-07	F											
BKP-01	M		251.0				275.0	44.0	16.3	13.3	16.9	19.3
BKP-02	M	24.0	250.5	16.5	12.0	36.8	270.0					16.9
BKP-03	F	20.5	226.0	13.8			253.0		13.5		15.0	14.0
BKP-04	M						278.0				13.5	
BKP-05	M		251.0				276.0				18.7	
DOR-01	M											
HGO-01	M			13.6	10.8			41.5	12.6	11.2		
HGO-04	F											
HGO-05	F	18.8	223.0			27.0	245.0					
HGO-08	F											
HGO-10	M	23.0				34.0	263.0	49.0	13.0	15.0		
HGO-12	F	21.2	202.0	14.0	9.7						16.1	13.9
HGO-15	M											
HGO-17	M	23.7	235.0	14.5	12.2	32.4	257.0					
HGO-19	F											
HGO-21	F		214.0	14.5	11.2	29.8	240.0		11.7	15.1		11.8
HGO-22	M			16.0	13.0						15.8	
HGO-23	F											
HGO-24	F			13.0	10.0			46.0	14.0	11.5		
HGO-26	F		202.0	14.5	10.1		230.0		11.0	15.0		14.8
HGO-27	M		213.5	14.0	10.0	25.5		42.0	11.0	14.0		
HGO-28	F											
HGO-30	F	20.7		16.5	11.6		245.0		13.6	17.0		
HGO-34	F	19.0	193.5	14.5	9.0	28.5	213.0		10.5	15.0		14.4
HGO-35	F	19.6	207.0	14.1	10.3	27.3	228.0	48.5	12.0	13.3		15.4
HGO-38	F	20.9	220.0	15.0	11.3	31.3	245.0	47.0	13.6	16.4		14.4
HGO-39	F	19.0	212.0	14.0	10.3	26.5	232.0	43.5				13.0
HGO-40	F	21.4	242.0	15.0	10.8							
HGO-41	M							52.0				
HGO-44	F											
HGO-46	F	19.2	207.0	11.0	10.0	28.0	228.0	39.0	13.7	10.6		12.5
HGO-48	F	17.9	184.5			25.9	204.5	38.0	11.2	13.0		
HGO-52	M											
HGO-53	M		235.0	15.7	11.9	33.0	260.0	46.0	13.4	13.9		
HGO-56	F	20.6	228.0	15.0	11.7	30.6						
HKK-04	M	24.5	264.0	16.0								
HKS-01	F											
HKS-03	M											
HKV-01	M											
HZB-01	F											
OSZ-01	F											

Ref #	Sex	MC1							MC2						
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth
DOL-01	F	48.0	15.0		9.0	9.5	17.0	14.5							
DOL-02	F														
HBP-01	M														
HKJ-01	M														
HKO-01	M														
HKO-02	M														
HKO-03	F														
HKO-04	F														
HKO-05	M														
HKO-06	M														
HKO-07	F														
BKP-01	M	47.0	17.5		12.0	9.0	17.5		70.0			8.0	9.0		
BKP-02	M								66.5			9.0	10.0	14.0	
BKP-03	F														
BKP-04	M														
BKP-05	M														
DOR-01	M														
HGO-01	M								65.7	18.8	16.3	7.5	8.2		
HGO-04	F								62.5	17.0					
HGO-05	F	42.1	13.3	13.3	9.7	6.8	13.5	10.7							
HGO-08	F	42.8	14.0		11.0	7.0	15.0		68.5	14.5		8.3	7.8	13.5	
HGO-10	M	48.0	16.0				16.0		72.0	19.0		8.5	9.0		
HGO-12	F				9.7	6.9			61.3	16.3		6.8	7.3		
HGO-15	M														
HGO-17	M								66.9	17.2	16.8	7.9	7.9	14.8	13.8
HGO-19	F														
HGO-21	F	41.0			10.8	8.2			65.1	16.1		8.2	8.4	15.6	13.2
HGO-22	M														
HGO-23	F														
HGO-24	F	43.0													
HGO-26	F														
HGO-27	M						14.4		61.0			8.0	8.0	12.9	
HGO-28	F	40.0			11.0	7.0			61.0			8.0	9.0		
HGO-30	F	42.6			11.3	7.8		12.7	65.2	16.0	15.2	8.7	9.2		
HGO-34	F	35.0	14.5		11.0	7.5			54.7	15.3		6.7	7.6	14.2	
HGO-35	F								61.5	15.5	17.3	7.3	8.0	12.6	
HGO-38	F														
HGO-39	F														
HGO-40	F	45.2	15.2	15.8	10.9	7.8	14.1	12.7		18.0	16.3			13.6	13.6
HGO-41	M	42.2	15.2	14.5	12.9	8.2	16.8	13.2	65.3	18.5	17.0	9.5	9.0	15.2	14.4
HGO-44	F														
HGO-46	F	39.6	14.2	13.2	10.1	6.9	13.1	11.3	58.5	15.2	15.7	6.9	7.5	13.1	12.5
HGO-48	F	36.5	12.5	12.7	9.3	6.9	13.6	11.4	56.5	14.6	14.1	7.0	7.0	11.8	11.6
HGO-52	M														
HGO-53	M	45.9	15.6	15.4	10.0	9.2	15.8	13.9	69.2	18.6	17.0	7.9	8.6	14.1	13.3
HGO-56	F	41.2	14.8	13.8	12.6	7.7	14.7	11.5	61.8	16.8		6.9	8.3		13.3
HKK-04	M	50.5	17.0		12.0							9.5			
HKS-01	F														
HKS-03	M														
HKV-01	M														
HZB-01	F														
OSZ-01	F														

Ref #	Sex	MC3							MC4						
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth
DOL-01	F														
DOL-02	F														
HBP-01	M														
HKJ-01	M														
HKO-01	M														
HKO-02	M														
HKO-03	F														
HKO-04	F														
HKO-05	M														
HKO-06	M														
HKO-07	F														
BKP-01	M														
BKP-02	M	65.0			8.5	9.0	15.5		55.0			6.5	8.0	14.0	
BKP-03	F								53.0			7.0			
BKP-04	M														
BKP-05	M														
DOR-01	M														
HGO-01	M	64.5		17.2	7.3	7.9									
HGO-04	F														
HGO-05	F														
HGO-08	F	68.8	12.5		8.0	7.5	13.0		58.5	9.3		6.0	6.5	11.5	
HGO-10	M		14.0		9.0	9.0	15.0								
HGO-12	F	58.7			7.3	7.8	13.4	12.1				6.1	6.7		
HGO-15	M														
HGO-17	M	68.4	14.3	16.5	7.4	8.2		14.1	55.3			6.7	7.2	12.4	
HGO-19	F	58.8	11.6	14.7	7.8	8.6	12.7	13.0	53.4	9.9	9.9	6.1	6.5		10.1
HGO-21	F	65.2			8.6	8.2	12.2	13.0							
HGO-22	M														
HGO-23	F														
HGO-24	F	67.0	12.5		7.0	9.0	14.0					6.0	8.0		
HGO-26	F														
HGO-27	M	60.0			8.0	8.0	12.3		54.5	10.0	10.5	6.0	6.4	10.2	
HGO-28	F	58.2													
HGO-30	F			15.7	8.1	8.7			54.6			6.9	7.3	12.3	
HGO-34	F	55.3	12.9		6.8	8.0	13.1		46.1	10.9		5.6	6.7	11.9	
HGO-35	F	58.3	15.8	16.3	7.5	9.0	13.5		48.6	10.0	11.5	6.3	7.4	11.8	
HGO-38	F														
HGO-39	F														
HGO-40	F		12.3	16.3			13.3	13.3							
HGO-41	M								53.7	11.1	12.0	6.8	7.6	13.0	12.9
HGO-44	F														
HGO-46	F	59.3	12.0	15.5	6.9	7.9	13.5	12.3	51.8	9.8	10.6	5.0	5.9	11.2	11.1
HGO-48	F	56.8	11.5	13.8	7.1	7.5	12.3	11.9	47.8	9.6	9.7	6.1	6.1	10.5	10.3
HGO-52	M														
HGO-53	M	67.5	13.3		7.6	9.1	14.0	13.7				5.9	7.7	12.3	12.3
HGO-56	F	61.4	12.3	15.9	8.2	8.5	13.6	13.0		10.8	12.6	6.6	7.6		
HKK-04	M				9.5					12.0		7.5	6.0	12.5	
HKS-01	F														
HKS-03	M														
HKV-01	M														
HZB-01	F														
OSZ-01	F														

Ref #	Sex	MC5							Hand first proximal phalanx							1st dist.phal.	
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Midshaft M/L diameter
DOL-01	F	55.5	14.0		7.5	7.0	12.0	13.0	32.0	15.5		9.0	6.0	12.0		21.0	6.5
DOL-02	F																
HBP-01	M																
HKJ-01	M																
HKO-01	M																
HKO-02	M																
HKO-03	F																
HKO-04	F																
HKO-05	M																
HKO-06	M																
HKO-07	F																
BKP-01	M	56.0			8.0	7.0											
BKP-02	M								31.0	16.5		9.0	6.0				
BKP-03	F																
BKP-04	M																
BKP-05	M																
DOR-01	M																
HGO-01	M																
HGO-04	F																
HGO-05	F								28.4	13.2	10.2	7.8	5.9	11.2	7.0	21.4	6.5
HGO-08	F	53.3	12.8		6.8	5.5	10.5		29.5	14.3		8.0	5.0	10.5			
HGO-10	M	55.0	13.0		9.0	6.5	12.0		32.0	16.0		10.0	7.0	12.0			
HGO-12	F								26.6	14.0	9.7	8.3	4.8	14.3	6.6	21.1	7.2
HGO-15	M																
HGO-17	M																
HGO-19	F																
HGO-21	F																
HGO-22	M																
HGO-23	F																
HGO-24	F	54.0	13.0		6.5	6.0	11.0										
HGO-26	F																
HGO-27	M	50.1	12.5	9.5	7.0	5.5	10.5										
HGO-28	F																
HGO-30	F																
HGO-34	F	43.2	12.7		6.6	5.8	11.6		24.0	14.8		7.8	5.2			21.0	
HGO-35	F	46.8	11.5	11.7	7.0	7.2	10.8		29.5	13.7	10.6	8.6	5.2	11.4			
HGO-38	F	51.3	13.4	11.0	7.0	6.2	11.7		29.2	14.8	11.2	8.6	6.0	11.2			
HGO-39	F	49.4	11.0	11.0	6.6	5.8	10.0	10.2									
HGO-40	F		14.0	9.8			10.0	10.9	29.1	15.5	11.1	7.4	5.3	10.6	7.4		
HGO-41	M								28.2	16.4	11.5	9.6	6.2	12.3	7.8	20.7	7.6
HGO-44	F																
HGO-46	F	46.7	13.7	9.6	6.6	5.2	10.8	9.8									
HGO-48	F	44.1	11.2	9.8	6.7	5.4	10.0	9.2									
HGO-52	M																
HGO-53	M	51.9	14.9	10.5	7.0	6.0	11.0	11.2	31.0	15.7	11.9	9.0	6.2	12.1	9.6	23.4	8.0
HGO-56	F	48.0	12.9	10.8	7.2	5.9	10.9	10.7	29.6	15.0	10.8	8.7	6.5	12.3	8.6	19.3	8.9
HKK-04	M	59.5	11.0		7.3	6.0	11.5									24.0	8.0
HKS-01	F																
HKS-03	M																
HKV-01	M																
HZB-01	F																
OSZ-01	F																

Ref #	Sex	Pelvis										Sacrum					
		Coxal max. length	Coxal max. breadth	Pubis length	Ischium length	*Ischium-pubis index*	Greater sciatic notch depth	Greater sciatic notch width	*Sciatic notch index*	Acetabulum vertical diameter	*Sciatic notch / acetabular index*	Max. height	Max. breadth	*Sacral index*	S1 body width / max. base diam.	S1 ala width	*Base-wing index*
DOL-01	F	193.0	148.5				38.5	21.9	*56.9*	45.9	*47.7*	116.0	114.0	*98.3*			
DOL-02	F																
HBP-01	M																
HKJ-01	M																
HKO-01	M																
HKO-02	M																
HKO-03	F																
HKO-04	F																
HKO-05	M																
HKO-06	M																
HKO-07	F																
BKP-01	M	224.0	167.0				37.0	20.7	*56.0*	60.4	*34.3*	123.0	110.5	*89.8*			
BKP-02	M		166.0							56.0		131.5					
BKP-03	F																
BKP-04	M		152.5				35.3	16.6	*47.0*	53.0	*31.3*						
BKP-05	M						41.0	21.4	*52.2*								
DOR-01	M																
HGO-01	M		142.0														
HGO-04	F																
HGO-05	F	182.0	134.5							46.9							
HGO-08	F	196.0	161.0	76.5	81.5	*93.9*	38.5	25.5	*66.2*	52.2	*48.9*						
HGO-10	M		156.0														
HGO-12	F												109.4				
HGO-15	M																
HGO-17	M									52.3							
HGO-19	F	186.0	147.7	70.0	78.9	*88.7*	36.2	16.0	*44.2*	46.8	*34.2*	123.5	125.6	*101.7*			
HGO-21	F	190.0	149.0				37.1	21.5	*58.0*	44.7	*48.1*	104.1			50.9	33.9	*66.6*
HGO-22	M	218.0					37.9	19.8	*52.2*	52.0	*38.1*		115.0		54.0		
HGO-23	F	180.0					29.6	15.5	*52.4*	41.5	*37.3*		119.0		76.0	57.0	*75.0*
HGO-24	F						37.8	24.1	*63.8*	45.8	*52.6*						
HGO-26	F						38.9	26.5	*68.1*	48.3	*54.9*		104.0				
HGO-27	M						40.0	26.5	*66.3*	50.9	*52.1*						
HGO-28	F									45.6							
HGO-30	F												121.2		52.7	34.3	*65.1*
HGO-34	F	179.0					44.7	22.8	*51.0*	43.8	*52.1*		102.0				
HGO-35	F	192.0	145.0				42.7	24.4	*57.1*	43.7	*55.8*						
HGO-38	F	202.0					53.0	26.7	*50.4*	49.4	*54.0*						
HGO-39	F		141.0				42.9	26.7	*62.2*	41.2	*64.8*						
HGO-40	F																
HGO-41	M							27.0		53.2	*50.8*						
HGO-44	F																
HGO-46	F	179.0	133.0				45.9	23.0	*50.1*	42.1	*54.6*	96.5	107.0	*110.9*			
HGO-48	F																
HGO-52	M																
HGO-53	M						38.0	21.0	*55.3*	55.2	*38.0*						
HGO-56	F	193.0	145.0				42.4	25.4	*59.9*	45.0	*56.4*	101.5	109.9	*108.3*	51.1		
HKK-04	M									62.5							
HKS-01	F																
HKS-03	M																
HKV-01	M																
HZB-01	F																
OSZ-01	F																

Ref #	Sex	Femur								Patella	
		Max. head diameter	Max. length	Circumference Midshaft	M/L (transverse) midshaft diam.	A/P (sagittal) midshaft diam.	*Robustness index*	Bicondylar width	Greater to lesser trochanter	Max. breadth	Max. length
DOL-01	F	40.0	411.0	87.0	28.0	26.0	*13.1*	69.5	53.6	36.0	36.0
DOL-02	F	39.0	389.3	77.0	26.0	21.5	*12.2*	69.5			
HBP-01	M										
HKJ-01	M										
HKO-01	M										
HKO-02	M										
HKO-03	F										
HKO-04	F										
HKO-05	M										
HKO-06	M										
HKO-07	F										
BKP-01	M	51.5	449.0		28.5	26.0	*12.1*	90.5			
BKP-02	M	50.3			29.0	29.0			57.2		
BKP-03	F			85.0	24.0	25.0		73.0			
BKP-04	M	44.5	438.0		28.0	29.0	*13.0*		65.9		
BKP-05	M	51.0	462.0		27.0	27.0	*11.7*	87.0	65.0		
DOR-01	M										
HGO-01	M										
HGO-04	F				23.5	26.9					
HGO-05	F	38.8	413.5	80.0	26.6	22.5	*11.9*	69.6	46.6	39.0	35.9
HGO-08	F	45.0	443.0	83.5	25.5	26.5	*11.7*	74.0	51.8		
HGO-10	M			90.0	26.0	29.0		83.0			
HGO-12	F			75.0							
HGO-15	M										
HGO-17	M										
HGO-19	F	42.4	407.0	81.5	24.9	26.1	*12.5*		52.5		
HGO-21	F	40.0	405.0	79.5	24.1	24.1	*11.9*		48.4		37.3
HGO-22	M	45.3	454.0	95.0	26.0	36.0	*13.7*		51.8		
HGO-23	F		395.0	80.0					77.7		36.2
HGO-24	F	40.0	401.0	82.5	25.0	27.0	*13.0*				
HGO-26	F	41.5	414.0	80.0	25.0	25.0	*12.1*				
HGO-27	M	42.3	403.0	80.5	27.0	24.0	*12.7*	70.0	44.6	40.4	38.4
HGO-28	F	39.3		74.0						41.4	36.2
HGO-30	F	43.5	410.0	90.0	28.5	28.4	*13.9*				
HGO-34	F	40.0		81.0	24.0	26.0					
HGO-35	F	39.6	407.0	85.0	25.3	28.3	*13.2*	70.0	54.0		
HGO-38	F							75.0			
HGO-39	F	37.3	413.0	81.0	25.0	26.5	*12.5*	69.0			
HGO-40	F	38.0		81.5	25.3	26.9					
HGO-41	M	46.3		90.0	26.2	27.5					
HGO-44	F										
HGO-46	F	38.6	348.0		21.1	21.6	*12.3*				
HGO-48	F										
HGO-52	M										
HGO-53	M			84.0	26.0	26.7		79.5		42.3	38.3
HGO-56	F	40.0	411.0	85.0	24.9	27.9	*12.8*	72.0	58.2	38.0	35.4
HKK-04	M		499.0		24.5	31.0	*11.1*			43.5	
HKS-01	F										
HKS-03	M										
HKV-01	M										
HZB-01	F										
OSZ-01	F										

Ref #	Sex	Tibia						Fibula				Calcaneus		Talus	
		Max. length	Prox. breadth	Circumference nutrient foramen	M/L (transverse) midshaft diam.	A/P (sagittal) midshaft diam.	Distal breadth	Max. length	Midshaft circumference	M/L (transverse) midshaft diam.	A/P (sagittal) midshaft diam.	Max. length	Max. height	Max. width	Max. length
DOL-01	F	345.0	68.0	80.0	19.0	25.0	45.5	332.5				78.5	43.4	40.0	55.0
DOL-02	F	315.5	63.0	82.5	19.0	28.3		302.0							
HBP-01	M														
HKJ-01	M														
HKO-01	M														
HKO-02	M														
HKO-03	F														
HKO-04	F														
HKO-05	M														
HKO-06	M														
HKO-07	F														
BKP-01	M	380.0	84.5	96.5	22.5	31.3	63.0					85.0	48.0	51.3	64.3
BKP-02	M				22.0	34.0	58.0					82.0	46.4	47.5	60.0
BKP-03	F		69.0		19.0	27.0									
BKP-04	M	385.0	74.0	101.0	25.5	34.0	53.0					85.0	45.3	45.6	61.0
BKP-05	M	373.0	79.0	98.0	22.0	33.6		360.0				82.0	54.0		64.0
DOR-01	M														
HGO-01	M	357.0		85.0											
HGO-04	F							298.0							
HGO-05	F	347.0	64.9	77.5			40.7								
HGO-08	F	345.0		87.0	19.0	28.0	48.5		42.5	11.0	13.5	76.5	45.0	45.5	51.5
HGO-10	M			104.0	24.5	34.3									
HGO-12	F														
HGO-15	M														
HGO-17	M														
HGO-19	F	329.0	67.3	80.5	18.0	26.2	43.9					74.0		39.1	52.6
HGO-21	F	326.0	68.1	85.0	20.4	27.9	46.9	309.0				70.7	37.7	29.3	49.1
HGO-22	M	372.0		100.0	21.4	36.7		361.0	50.0						
HGO-23	F	303.0		83.5	19.9	26.2	40.3							34.3	49.5
HGO-24	F	326.5		86.0	19.0	28.0						71.0			50.0
HGO-26	F			84.0	20.0	25.3	40.0	325.0		10.9	14.8				
HGO-27	M	324.5		82.0	18.0	28.3	43.6								
HGO-28	F		64.0	80.0											
HGO-30	F							319.0						39.0	
HGO-34	F														
HGO-35	F	337.0	67.7	88.5	20.3	28.8	44.2								
HGO-38	F	345.0	69.7	95.0	21.3	26.8									
HGO-39	F	323.5		82.0	20.0	28.0	40.7	310.0				68.5	41.0		
HGO-40	F	359.0	68.3	86.0											
HGO-41	M														
HGO-44	F														
HGO-46	F	309.0		74.0											
HGO-48	F														
HGO-52	M	366.0		95.0	20.6	30.1	47.7								
HGO-53	M	358.0		93.0	21.0	31.0				12.0	15.6				
HGO-56	F	343.0	67.7	93.8	22.3	30.0	43.0	323.0				68.7	42.3		
HKK-04	M				22.0	33.0				13.5	20.0	88.0			61.5
HKS-01	F														
HKS-03	M														
HKV-01	M														
HZB-01	F														
OSZ-01	F														

Ref #	Sex	MT1							MT2						
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth
DOL-01	F	63.0	20.0	29.0	13.0	13.0	20.0		70.0	15.0	22.0	7.0	10.0	12.0	
DOL-02	F														
HBP-01	M														
HKJ-01	M														
HKO-01	M														
HKO-02	M														
HKO-03	F														
HKO-04	F														
HKO-05	M														
HKO-06	M														
HKO-07	F														
BKP-01	M	66.0			15.0				79.0			10.0	8.0		
BKP-02	M	60.0			15.5	14.0									
BKP-03	F														
BKP-04	M														
BKP-05	M														
DOR-01	M														
HGO-01	M														
HGO-04	F														
HGO-05	F	55.9		25.1	10.4	11.5									
HGO-08	F	60.0	20.0	25.5	13.5	12.5	20.5		71.5	14.5	19.0	7.3	8.5	12.3	
HGO-10	M														
HGO-12	F														
HGO-15	M														
HGO-17	M														
HGO-19	F	57.5	17.4	24.8	12.7	13.8		19.0	65.2	14.5	18.8	8.5	8.9	11.4	14.0
HGO-21	F														
HGO-22	M														
HGO-23	F														
HGO-24	F	59.0			13.0	11.0	18.0		71.5	14.0	18.5	8.5	8.5	12.3	
HGO-26	F														
HGO-27	M	59.0	19.5	25.6	12.5	12.8	18.5					6.5	9.0		
HGO-28	F	53.0		25.6	12.5	11.5									
HGO-30	F														
HGO-34	F				12.5	10.7				13.0		7.2	9.0		
HGO-35	F	55.5	18.0	27.0	12.2	13.6	20.6		66.0	13.6		6.3	8.0	11.3	
HGO-38	F				13.0	13.0	20.7								
HGO-39	F														
HGO-40	F											7.4	8.4	11.3	14.8
HGO-41	M	59.3		27.5	14.0	13.2		20.7							
HGO-44	F														
HGO-46	F														
HGO-48	F														
HGO-52	M	60.0		27.1	15.0	16.2			72.3			7.0	9.0		
HGO-53	M	61.0		26.7	11.8	12.3		18.8	72.5	14.0		6.5	8.4		
HGO-56	F	59.6	21.0	26.8	15.1	13.1		19.4	65.7	13.7	19.6	8.1	8.6	12.6	15.4
HKK-04	M	67.5			16.0							8.3			
HKS-01	F														
HKS-03	M														
HKV-01	M														
HZB-01	F														
OSZ-01	F														

Ref #	Sex	MT3							MT4						
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth
DOL-01	F	66.5	13.5	19.0	6.5	10.5	10.5		64.0	14.0	17.5	9.0	9.0	8.5	
DOL-02	F														
HBP-01	M														
HKJ-01	M														
HKO-01	M														
HKO-02	M														
HKO-03	F														
HKO-04	F														
HKO-05	M														
HKO-06	M														
HKO-07	F														
BKP-01	M	74.0			10.0	7.0			74.0			10.0	7.0		
BKP-02	M														
BKP-03	F														
BKP-04	M														
BKP-05	M														
DOR-01	M														
HGO-01	M														
HGO-04	F														
HGO-05	F														
HGO-08	F	68.5	11.5	18.0	7.0	10.0	10.0		66.0	12.5	16.0	6.5	9.3	9.8	
HGO-10	M														
HGO-12	F														
HGO-15	M														
HGO-17	M														
HGO-19	F	60.7	12.9	18.1	7.9	8.8	11.4	19.4	64.2	13.0	16.0	8.5	9.9	10.3	
HGO-21	F														
HGO-22	M														
HGO-23	F														
HGO-24	F	68.0	13.0		6.5	10.0	10.0								
HGO-26	F														
HGO-27	M	62.0			6.5	10.0						6.5	10.0		
HGO-28	F														
HGO-30	F														
HGO-34	F														
HGO-35	F	62.0	13.2		5.7	9.2	9.6		62.0						
HGO-38	F	57.8	12.1	18.0	6.5	8.4	8.8								
HGO-39	F														
HGO-40	F				7.7	8.5	9.7	14.3				10.3	6.7	9.7	13.3
HGO-41	M								63.5	14.7	19.0	7.1	9.7	11.2	13.8
HGO-44	F														
HGO-46	F														
HGO-48	F														
HGO-52	M		15.8		7.5	9.7			67.2	14.3		7.9	10.5		
HGO-53	M	66.3	12.8	19.3	7.3	8.7		15.1		15.2	16.3	10.1	7.6		
HGO-56	F	63.3	11.6	17.9	7.0	8.5	11.1	13.8	62.7	13.1	17.3	7.6	8.9	10.7	13.4
HKK-04	M				6.5							7.0			
HKS-01	F														
HKS-03	M														
HKV-01	M														
HZB-01	F														
OSZ-01	F														

Ref #	Sex	MT5							Foot first proximal phalanx							1st dist.phalanx	
		Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Proximal M/L breadth	Proximal A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Distal M/L breadth	Distal A/P breadth	Max. length	Midshaft M/L
DOL-01	F																
DOL-02	F																
HBP-01	M																
HKJ-01	M																
HKO-01	M																
HKO-02	M																
HKO-03	F																
HKO-04	F																
HKO-05	M																
HKO-06	M																
HKO-07	F																
BKP-01	M	77.5			10.0	7.0			35.0	23.0		14.0	10.0	18.0			
BKP-02	M																
BKP-03	F																
BKP-04	M																
BKP-05	M																
DOR-01	M															21.0	10.0
HGO-01	M																
HGO-04	F																
HGO-05	F																
HGO-08	F	66.5	19.5	15.0	9.0	7.0	10.5		34.0	19.0		12.0	7.5	15.0		21.5	8.0
HGO-10	M																
HGO-12	F																
HGO-15	M																
HGO-17	M																
HGO-19	F	67.4	18.4	12.8	10.8	7.3	11.0	11.9									
HGO-21	F																
HGO-22	M																
HGO-23	F																
HGO-24	F	68.0			10.5	7.5			30.5	16.5		11.5	8.0	14.0		24.0	11.5
HGO-26	F																
HGO-27	M																
HGO-28	F	62.0	18.5		10.5	7.0											
HGO-30	F																
HGO-34	F																
HGO-35	F	61.6															
HGO-38	F																
HGO-39	F																
HGO-40	F								33.4	17.9		10.8	8.9	15.2	8.9	22.0	9.2
HGO-41	M																
HGO-44	F																
HGO-46	F																
HGO-48	F																
HGO-52	M	70.7	21.3	14.9	11.7	9.0					16.5	13.4	9.6				
HGO-53	M				10.0	7.4			33.6	19.0	17.1	12.2	9.7	16.4	13.6	26.7	9.5
HGO-56	F	62.6	20.0	13.6	11.2	7.2	12.2		34.0	19.4	15.8	12.8	9.0				
HKK-04	M				8.0												
HKS-01	F																
HKS-03	M																
HKV-01	M																
HZB-01	F																
OSZ-01	F																

Appendix 17
Skull sexual dimorphism, Körös Culture

Sex		N	Mean	Std. Deviation	Minimum	Maximum
Female	Skull max. length	4	178.50	2.380	177	182
	Skull max. breadth	4	137.75	4.646	133	144
	Skull max. height	1	130.00	.	130	130
	Cranial index	4	77.150	1.8841	74.7	79.1
	Cranial length-height index	1	73.00	.	73	73
	Cranial breadth-height index	1	97.700	.	97.7	97.7
	Min. frontal breadth	5	93.90	3.879	89	99
	Frontoparietal index	4	67.275	1.7746	65.3	69.6
	Mastoid length	3	28.67	3.215	25	31
	Total facial height	2	115.50	3.536	113	118
	Upper facial height	2	67.50	2.121	66	69
	Bizygomatic breadth	2	120.000	4.9497	116.5	123.5
	Total facial index	2	97.75	1.061	97	99
	Upper facial index	2	56.300	.5657	55.9	56.7
	Nasal height	3	48.50	2.784	46	51
	Nasal breadth	3	24.333	1.0408	23.5	25.5
	Nasal index	3	50.37	4.899	47	56
	Orbital height	3	31.17	2.566	29	34
	Orbital breadth	3	37.17	1.893	35	39
	Orbital index	3	84.200	11.2654	76.3	97.1
	Maxilloalveolar length	2	52.25	1.061	52	53
	Maxilloalveolar breadth	2	61.00	5.657	57	65
	Maxilloalveolar index	2	116.850	13.2229	107.5	126.2
	Palatal length	2	42.50	.707	42	43
	Palatal breadth	2	36.50	4.950	33	40
	Palatal index	2	85.800	10.1823	78.6	93.0
Male	Skull max. length	5	185.40	8.081	175	197
	Skull max. breadth	5	139.40	5.857	130	146
	Skull max. height	1	127.00	.	127	127
	Cranial index	5	75.280	4.2676	69.1	80.6
	Cranial length-height index	1	72.60	.	73	73
	Cranial breadth-height index	1	90.100	.	90.1	90.1
	Min. frontal breadth	5	98.10	5.436	90	105
	Frontoparietal index	4	70.525	4.1860	64.7	74.6
	Mastoid length	5	29.20	3.564	26	35
	Total facial height	0	.	.	.	.
	Upper facial height	2	70.75	5.303	67	75
	Bizygomatic breadth	1	118.000	.	118.0	118.0
	Total facial index	0	.	.	.	.
	Upper facial index	0	.	.	.	.
	Nasal height	2	51.00	4.243	48	54
	Nasal breadth	2	24.000	.0000	24.0	24.0
	Nasal index	2	47.20	3.960	44	50

	Orbital height	2	32.25	1.061	32	33
	Orbital breadth	2	37.75	.354	38	38
	Orbital index	2	85.400	1.9799	84.0	86.8
	Maxilloalveolar length	2	53.00	2.828	51	55
	Maxilloalveolar breadth	3	63.33	4.041	59	67
	Maxilloalveolar index	2	118.750	4.3134	115.7	121.8
	Palatal length	1	41.00	.	41	41
	Palatal breadth	3	38.00	1.732	36	39
	Palatal index	1	87.800	.	87.8	87.8

Mandible

Sex		N	Mean	Std. Deviation	Minimum	Maximum
Female	Mandible max. length	3	73.33	1.756	72	75
	Mandible bicondylar breadth	2	111.00	5.657	107	115
	Mandible bigonial breadth	3	94.67	3.215	91	97
	Ramus height	3	55.67	3.215	52	58
	Ramus min. breadth	3	32.00	2.646	30	35
	Symphysis height	3	29.83	5.923	23	34
	Gonial angle	3	125.67	5.132	120	130
	Mandible condylar width	3	18.43	1.210	18	20
Male	Mandible max. length	3	77.17	3.175	74	79
	Mandible bicondylar breadth	3	124.33	5.508	119	130
	Mandible bigonial breadth	3	97.50	5.679	91	102
	Ramus height	3	61.67	4.726	58	67
	Ramus min. breadth	3	33.33	1.756	32	35
	Symphysis height	2	34.50	1.414	34	36
	Gonial angle	3	118.83	9.005	110	128
	Mandible condylar width	3	21.17	2.566	19	24

Appendix 18
Skull sexual dimorphism, Tisza Culture

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Skull max. length	8	168	188	179.88	6.312
	Skull max. breadth	8	124	138	131.25	5.175
	Skull max. height	5	132	140	137.20	3.564
	Cranial index	8	66.5	80.4	73.100	4.7509
	Cranial length-height index	4	73	77	75.63	1.634
	Cranial breadth-height index	4	76.8	104.5	94.625	12.4320
	Min. frontal breadth	11	89	97	92.85	3.228
	Frontoparietal index	5	67.4	73.1	70.060	2.5755
	Mastoid length	17	26	33	30.01	2.250
	Total facial height	3	94	114	105.67	10.408
	Upper facial height	8	52	69	62.68	5.614
	Bizygomatic breadth	2	115.0	118.0	116.500	2.1213
	Total facial index	1	95	95	94.80	.
	Upper facial index	1	53.9	53.9	53.900	.
	Nasal height	8	39	50	44.76	3.466
	Nasal breadth	7	19.0	25.7	22.957	2.2277
	Nasal index	7	46	59	51.06	4.252
	Orbital height	9	25	34	30.09	3.120
	Orbital breadth	8	34	41	36.65	2.437
	Orbital index	8	64.8	89.7	81.075	7.8830
	Maxilloalveolar length	8	45	55	51.11	3.882
	Maxilloalveolar breadth	5	56	62	59.80	2.387
	Maxilloalveolar index	5	113.0	127.3	121.000	6.5943
	Palatal length	5	38	45	41.40	3.362
	Palatal breadth	6	32	35	33.93	1.033
	Palatal index	4	75.6	89.5	84.950	6.3164
Male	Skull max. length	7	177	194	186.29	6.130
	Skull max. breadth	6	129	151	134.83	8.208
	Skull max. height	3	143	152	146.67	4.726
	Cranial index	6	67.9	77.8	72.583	4.0147
	Cranial length-height index	3	75	80	78.03	2.442
	Cranial breadth-height index	3	109.0	116.9	112.267	4.1235
	Min. frontal breadth	8	93	106	98.81	3.919
	Frontoparietal index	5	70.2	74.8	72.200	1.8641
	Mastoid length	10	26	39	33.62	3.887
	Total facial height	1	116	116	115.90	.
	Upper facial height	5	65	73	68.08	3.414
	Bizygomatic breadth	1	150.0	150.0	150.000	.
	Total facial index	0				
	Upper facial index	0				
	Nasal height	7	47	56	50.01	3.199

	Nasal breadth	7	23.0	27.5	24.900	1.4944
	Nasal index	6	46	54	50.00	2.585
	Orbital height	7	24	34	30.21	3.011
	Orbital breadth	6	35	42	38.00	2.363
	Orbital index	6	68.6	84.2	78.083	6.4840
	Maxilloalveolar length	4	48	58	52.75	4.291
	Maxilloalveolar breadth	7	59	66	62.51	2.633
	Maxilloalveolar index	4	100.9	130.5	119.000	12.9713
	Palatal length	6	42	48	44.35	1.970
	Palatal breadth	9	33	39	36.22	1.731
	Palatal index	6	68.8	88.6	81.575	6.8939

Mandible

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Mandible max. length	12	61	77	72.13	4.411
	Mandible bicondylar breadth	0				
	Mandible bigonial breadth	4	88	98	91.63	4.498
	Ramus height	13	47	61	52.75	4.048
	Ramus min. breadth	18	25	34	30.41	2.326
	Symphysis height	9	26	36	31.94	3.572
	Gonial angle	15	111	137	124.83	7.116
	Mandible condylar width	9	17	21	18.99	1.655
Male	Mandible max. length	10	72	84	78.80	4.151
	Mandible bicondylar breadth	1	112	112	112.00	.
	Mandible bigonial breadth	2	95	107	101.00	8.485
	Ramus height	7	52	67	58.00	5.447
	Ramus min. breadth	13	29	37	32.30	2.198
	Symphysis height	8	30	37	33.21	2.742
	Gonial angle	10	109	147	123.10	11.484
	Mandible condylar width	3	20	22	21.33	1.155

Statistically significant sexual dimorphism skull

Sex		Skull max. height	Cranial breadth-height index	Min. frontal breadth	Mastoid length	Nasal height	Palatal breadth	Mandible max. length	Ramus height
Female	Mean	137.20	94.625	92.85	30.01	44.76	33.93	72.13	52.75
	N	5	4	11	17	8	6	12	13
	Std. Deviation	3.564	12.4320	3.228	2.250	3.466	1.033	4.411	4.048
	Median	139.00	98.600	93.00	29.80	45.00	34.00	72.50	53.00
Male	Mean	146.67	112.267	98.81	33.62	50.01	36.22	78.80	58.00
	N	3	3	8	10	7	9	10	7
	Std. Deviation	4.726	4.1235	3.919	3.887	3.199	1.731	4.151	5.447
	Median	145.00	110.900	99.50	32.75	50.00	36.00	79.00	57.00
Total	Mean	140.75	102.186	95.36	31.35	47.21	35.31	75.16	54.58
	N	8	7	19	27	15	15	22	20
	Std. Deviation	6.135	13.1098	4.571	3.391	4.213	1.855	5.399	5.131
	Median	140.00	104.500	95.40	31.90	47.10	35.00	75.25	53.00

	Skull max. height	Cranial breadth-height index	Min. frontal breadth	Mastoid length	Nasal height	Palatal breadth
Mann-Whitney U	.000	.000	11.000	39.000	6.000	5.500
Z	-2.249	-2.121	-2.734	-2.311	-2.557	-2.545
Asymp. Sig. (2-tailed)	.024	.034	.006	.021	.011	.011
Effect size (*r*)	-.795	-.802	-.627	-.445	-.660	-.657

	Mandible max.length	Ramus height
Mann-Whitney U	14.000	19.000
Z	-3.042	-2.118
Asymp. Sig. (2-tailed)	.002	.034
Effect size (*r*)	-.649	-.474

Appendix 19
Sexual dimorphism in thorax and spine, Tisza Culture

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Manubrium length	4	39	52	45.15	5.712
	Sternum body length	4	77	102	88.40	10.301
	Sternum index	2	45.4	55.8	50.600	7.3539
	Sacrum max. height	4	97	124	106.40	11.828
	Sacrum max. breadth	8	102	126	112.26	8.604
	Sacral index	3	101.7	110.9	106.967	4.7427
	S1 body width	4	50.9	76.0	57.675	12.2432
	S1 ala width	3	33.9	57.0	41.733	13.2228
	Base-wing index	3	65.1	75.0	68.900	5.3357
Male	Manubrium length	4	52	57	54.00	2.160
	Sternum body length	0				
	Sternum index	0				
	Sacrum max. height	2	123	132	127.25	6.010
	Sacrum max. breadth	2	111	115	112.75	3.182
	Sacral index	1	89.8	89.8	89.800	.
	S1 body width	1	54.0	54.0	54.000	.
	S1 ala width	0				
	Base-wing index	0				

Statistical significance of sexual dimorphism

	Manubrium length	Sacrum max. height	Sacrum max. breadth	Sacral index	S1 body width
Mann-Whitney U	.500	1.000	6.000	.000	1.000
Wilcoxon W	10.500	11.000	42.000	1.000	11.000
Z	-2.178	-1.389	-.522	-1.342	-.707
Asymp. Sig. (2-tailed)	.029	.165	.602	.180	.480
Effect size	-.77				

Appendix 20
Sexual dimorphism in shoulders and upper limbs, Tisza Culture

Clavicle

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Clavicle max. length	10	121.0	141.0	130.480	6.4156
	Clavicle midshaft circumference	9	34	40	36.44	2.171
	Clavicle robustness index	8	26.9	30.4	28.125	1.2372
	Claviculohumeral index	10	42.8	55.1	46.000	3.5261
	Clavicle midshaft max. diameter	1	11.4	11.4	11.400	.
	Clavicle midshaft min. diameter	1	8.9	8.9	8.900	.
Male	Clavicle max. length	4	143.0	160.5	151.375	7.5650
	Clavicle midshaft circumference	7	35	45	39.86	3.375
	Clavicle robustness index	3	24.6	30.4	27.633	2.9092
	Claviculohumeral index	4	44.8	49.3	46.800	2.0149
	Clavicle midshaft max. diameter	3	11.2	12.0	11.567	.4041
	Clavicle midshaft min. diameter	1	10.1	10.1	10.100	.

Scapula

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Scapula max. length	1	122	122	122.00	.
	Scapula max. breadth	1	126	126	126.00	.
	Scapular index	0				
	Scapula spine length	2	124	124	123.80	.283
	Glenoid cavity length	15	32	39	34.44	1.709
Male	Scapula max. length	2	143	173	158.00	21.213
	Scapula max. breadth	2	105	118	111.50	9.192
	Scapular index	2	68.2	73.4	70.800	3.6770
	Scapula spine length	2	140	154	147.00	9.899
	Glenoid cavity length	10	36	42	39.84	2.107

Significant Sexual Dimorphism

	Clavicle max. length	Clavicle midshaft circumference	Glenoid cavity length
Mann-Whitney U	.000	11.500	4.500
Z	-2.828	-2.152	-3.914
Asymp. Sig. (2-tailed)	.005	.031	.000
Effect size	-.756	-.538	-.783

Humerus

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Humerus head diameter	16	34	44	39.44	2.101
	Humerus max. length	15	246.0	309.0	283.800	18.4350
	Humerus midshaft circumference	9	58	68	61.06	3.340
	Humerus robustness index	9	19.4	23.6	21.233	1.3982
	Humerus midshaft min. diameter	15	15	21	17.78	1.693
	Humerus midshaft max. diameter	15	17	22	19.21	1.870
	Humerus epicondylar width	14	52	60	55.48	2.194
	Radiohumeral index	12	72.0	82.0	75.992	2.9901
Male	Humerus head diameter	11	39	52	46.57	3.667
	Humerus max. length	9	290.0	342.0	321.144	17.0187
	Humerus midshaft circumference	6	58	70	65.75	4.855
	Humerus robustness index	6	18.1	21.6	20.433	1.2628
	Humerus midshaft min. diameter	11	18	22	19.41	1.410
	Humerus midshaft max. diameter	11	18	24	21.41	1.785
	Humerus epicondylar width	9	58	71	64.09	3.801
	Radiohumeral index	6	73.6	78.1	76.033	1.7806

Significant sexual dimorphism in humerus

	Humerus head diameter	Humerus max. length	Humerus midshaft min. diameter	Humerus midshaft max. diameter	Humerus epicondylar width
Mann-Whitney U	10.000	8.000	36.500	32.000	3.000
Z	-3.853	-3.549	-2.392	-2.624	-3.781
Asymp. Sig. (2-tailed)	.000	.000	.017	.009	.000
Effect size	-.742	-.724	-.469	-.515	-.788

Radius

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Radius head max. diameter	12	17.9	21.4	19.900	1.1217
	Radius max. length	13	185	242	212.38	15.512
	Radius midshaft medio-lateral diameter	13	11.0	16.5	14.223	1.2716
	Radius midshaft antero-posterior diameter	12	9.0	11.7	10.500	.8257
	Radius distal breadth	9	25.9	31.3	28.322	1.8827
Male	Radius head max. diameter	4	23.0	24.5	23.800	.6272
	Radius max. length	7	214	264	242.86	16.449
	Radius midshaft medio-lateral diameter	7	13.6	16.5	15.186	1.1335
	Radius midshaft antero-posterior diameter	6	10.0	13.0	11.650	1.0728
	Radius distal breadth	5	25.5	36.8	32.340	4.1795

Ulna

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Ulna max. length	11	204.5	253.0	233.045	14.6739
	Ulna midshaft circumference	6	38	49	43.67	4.332
	Ulna midshaft medio-lateral diameter	10	10.5	14.0	12.480	1.3307
	Ulna midshaft antero-posterior diameter	9	10.6	17.0	14.100	2.1558
	Proximal ulna inferior medial trochlear notch length	2	15.0	16.1	15.550	.7778
	Proximal ulna inferior medial trochlear notch width	9	11.8	15.4	13.800	1.1543
Male	Ulna max. length	7	257.0	278.0	268.429	8.4233
	Ulna midshaft circumference	6	42	52	45.75	4.120
	Ulna midshaft medio-lateral diameter	5	11.0	16.3	13.260	1.9282
	Ulna midshaft antero-posterior diameter	5	11.2	15.0	13.480	1.4132
	Proximal ulna inferior medial trochlear notch length	4	13.5	18.7	16.225	2.1747
	Proximal ulna inferior medial trochlear notch width	2	16.9	19.3	18.100	1.6971

Radius and Ulna significant sexual dimorphism

	Radius head max. diameter	Radius max. length	Radius midshaft AP diameter	Ulna max length	Prox ulna inf. medial trochlear notch width
Mann-Whitney U	.000	8.000	13.500	.000	.000
Z	-2.913	-2.976	-2.114	-3.496	-2.126
Asymp. Sig. (2-tailed)	.004	.003	.035	.000	.033
Effect size	-.728	-.665	-.498	-.824	-.641

Appendix 21
Sexual dimorphism in hands, Tisza Culture

First metacarpal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MC1 max. length	11	35	45	40.82	2.959
	MC1 proximal medio-lateral breadth	7	13	15	14.07	.920
	MC1 proximal antero-posterior breadth	5	12.7	15.8	13.760	1.2054
	MC1 midshaft medio-lateral breadth diameter	11	9	13	10.67	.927
	MC1 midshaft antero-posterior diameter	11	6.8	8.2	7.318	.4916
	MC1 distal medio-lateral breadth breadth	6	13	15	14.00	.738
	MC1 distal antero-posterior breadth	6	10.7	12.7	11.717	.8110
Male	MC1 max. length	5	42	51	46.72	3.046
	MC1 proximal medio-lateral breadth	5	15	18	16.26	.963
	MC1 proximal antero-posterior breadth	2	14.5	15.4	14.950	.6364
	MC1 midshaft medio-lateral diameter	4	10	13	11.73	1.226
	MC1 midshaft antero-posterior diameter	3	8.2	9.2	8.800	.5292
	MC1 distal medio-lateral breadth breadth	5	14	18	16.10	1.166
	MC1distal antero-posterior breadth	2	13.2	13.9	13.550	.4950

MC1 sexual dimorphism

	MC1 max. length	MC1 proximal ML breadth	MC1 midshaft AP diameter	MC1 distal ML breadth	MC1 distal AP breadth
Mann-Whitney U	4.000	.500	.500	2.000	.000
Z	-2.662	-2.766	-2.511	-2.373	-2.012
Asymp. Sig. (2-tailed)	.008	.006	.012	.018	.044
Effect size	-.666	-.798	-.671	-.715	-.711

Second metacarpal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MC2 max. length	11	55	69	61.51	3.966
	MC2 proximal medio-lateral breadth	11	14.5	18.0	15.936	1.0623
	MC2 proximal antero-posterior breadth	5	14.1	17.3	15.720	1.1967
	MC2 midshaft medio-lateral diameter	10	7	9	7.48	.742
	MC2 midshaft antero-posterior diameter	10	7	9	8.01	.717
	MC2 distal medio-lateral breadth breadth	7	12	16	13.49	1.209
	MC2 distal antero-posterior breadth	5	11.6	13.6	12.840	.8019
Male	MC2 max. length	8	61	72	67.08	3.373
	MC2 proximal medio-lateral breadth	5	17.2	19.0	18.420	.7085
	MC2 proximal antero-posterior breadth	4	16.3	17.0	16.775	.3304
	MC2 midshaft medio-lateral diameter	9	8	10	8.42	.743
	MC2 midshaft antero-posterior diameter	8	8	10	8.71	.692
	MC2 distal medio-lateral breadth	5	13	15	14.20	.880
	MC2 distal antero-posterior breadth	3	13.3	14.4	13.833	.5508

Third metacarpal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MC3 max. length	11	55	69	60.71	4.382
	MC3 proximal medio-lateral breadth	9	11.5	15.8	12.600	1.2796
	MC3 proximal antero-posterior breadth	7	13.8	16.3	15.457	.9126
	MC3 midshaft medio-lateral diameter	11	6.8	8.6	7.573	.6035
	MC3 midshaft antero-posterior diameter	11	8	9	8.25	.550
	MC3 distal medio-lateral breadth	11	12.2	14.0	13.145	.5574
	MC3 distal antero-posterior breadth	7	11.9	13.3	12.657	.5442
Male	MC3 max. length	5	60	68	65.08	3.280
	MC3 proximal medio-lateral breadth	3	13.3	14.3	13.867	.5132
	MC3 proximal antero-posterior breadth	2	16.5	17.2	16.850	.4950
	MC3 midshaft medio-lateral diameter	7	7.3	9.5	8.186	.8435
	MC3 midshaft antero-posterior diameter	6	8	9	8.53	.557
	MC3 distal medio-lateral breadth	4	12.3	15.5	14.200	1.4119
	MC3 distal antero-posterior breadth	2	13.7	14.1	13.900	.2828

Sexual dimorphism on second and third metacarpals

	MC2 max. length	MC2 max proximal ML breadth	MC2 midshaft ML diameter	MC3 proximal AP breadth	MC3 distal AP breadth
Mann-Whitney U	11.500	1.000	20.000	.000	.000
Z	-2.685	-3.002	-2.048	-2.058	-2.084
Asymp. Sig. (2-tailed)	.007	.003	.041	.040	.037
Effect size	-.616	-.751	-.469	-.683	-.557

Fourth metacarpal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MC4 max. length	8	46	59	51.73	4.061
	MC4 proximal medio-lateral breadth	7	9.3	10.9	10.043	.5968
	MC4 proximal antero-posterior breadth	5	9.7	12.6	10.860	1.2012
	MC4 midshaft medio-lateral diameter	11	5.0	7.0	6.155	.5646
	MC4 midshaft antero-posterior diameter	10	6	8	6.87	.678
	MC4 distal medio-lateral diameter	6	11	12	11.53	.628
	MC4 distal antero-posterior diameter	3	10.1	11.1	10.500	.5292
Male	MC4 max length	4	54	55	54.63	.699
	MC4 proximal medio-lateral breadth	3	10.0	12.0	11.033	1.0017
	MC4 proximal antero-posterior breadth	2	10.5	12.0	11.250	1.0607
	MC4 midshaft medio-lateral diameter	6	5.9	7.5	6.567	.5854
	MC4 midshaft antero-posterior diameter	6	6	8	7.15	.789
	MC4 distal medio-lateral diameter	6	10	14	12.40	1.247
	MC4 distal antero-posterior diameter	2	12.3	12.9	12.600	.4243

Fifth metacarpal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MC5 max. length	9	43.2	54.0	48.533	3.8039
	MC5 proximal medio-lateral breadth	10	11	14	12.62	1.045
	MC5 proximal antero-posterior breadth	7	9.6	11.7	10.529	.7973
	MC5 midshaft medio-lateral breadth	9	6.5	7.2	6.778	.2386
	MC5 midshaft antero-posterior breadth	9	5	7	5.89	.582
	MC5 distal medio-lateral breadth	10	10	12	10.73	.620
	MC5 distal antero-posterior breadth	5	9	11	10.16	.688
Male	MC5 max. length	5	50.1	59.5	54.500	3.6613
	MC5 proximal medio-lateral breadth	4	11	15	12.85	1.609
	MC5 proximal antero-posterior breadth	2	9.5	10.5	10.000	.7071
	MC5 midshaft medio-lateral breadth	5	7.0	9.0	7.660	.8532
	MC5 midshaft antero-posterior breadth	5	6	7	6.20	.570
	MC5 distal medio-lateral breadth	4	11	12	11.25	.645
	MC5 distal antero-posterior breadth	1	11	11	11.20	.

First proximal and distal phalanges

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Hand first prox. phalanx length	8	24	30	28.24	1.978
	Hand first prox. phalanx proximal medio-lateral breadth	8	13.2	15.5	14.413	.7549
	Hand first prox. phalanx proximal antero-posterior breadth	6	9.7	11.2	10.600	.5692
	Hand first prox. phalanx midshaft medio-lateral diameter	8	7	9	8.15	.472
	Hand first prox. phalanx midshaft antero-posterior diameter	8	5	7	5.49	.582
	Hand first prox. phalanx distal medio-lateral breadth	7	11	14	11.65	1.311
	Hand first prox. phalanx distal antero-posterior breadth	4	7	9	7.40	.864
	Hand first distal phalanx max. length	4	19	21	20.70	.949
	Hand first distal phalanx midshaft medio-lateral diameter	3	6.5	8.9	7.533	1.2342

Male	Hand first prox. phalanx length	4	28	32	30.55	1.636
	Hand first prox. phalanx prox. medio-lateral breadth	4	15.7	16.5	16.150	.3697
	Hand first prox. phalanx prox. antero-posterior breadth	2	11.5	11.9	11.700	.2828
	Hand first prox. phalanx midshaft medio-lateral diameter	4	9	10	9.40	.490
	Hand first prox. phalanx midshaft antero-posterior diameter	4	6	7	6.35	.443
	Hand first prox. phalanx distal medio-lateral breadth	3	12	12	12.14	.151
	Hand first prox. phalanx distal antero-posterior breadth	2	8	10	8.70	1.273
	Hand first distal phalanx max. length	3	21	24	22.70	1.758
	Hand first distal phalanx midshaft medio-lateral diameter	3	7.6	8.0	7.867	.2309

Fifth metacarpal, first proximal and first distal hand phalanges

	MC5 max. length	MC5 midshaft ML breadth	Hand 1st prox. phalanx prox ML breadth	Hand 1st prox phalanx prox. AP breadth	Hand 1st prox. phalanx midshaft ML diameter	Hand 1st prox phalanx midshaft AP diameter
Mann-Whitney U	5.000	4.000	.000	.000	.000	3.500
Z	-2.333	-2.506	-2.722	-2.000	-2.732	-2.134
Asymp. Sig. (2-tailed)	.020	.012	.006	.046	.006	.033
Effect size	-.624	-.670	-.786	-.577	-.789	-.754

Appendix 22
Pelvic sexual dimorphism, Tisza Culture

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Coxal max. length	10	179	202	187.90	7.965
	Coxal max. breadth	8	133.0	161.0	144.525	8.8458
	Pubis length	2	70.0	76.5	73.250	4.5962
	Ischium length	2	78.9	81.5	80.200	1.8385
	Ischium-pubis index	2	88.7	93.9	91.300	3.6770
	Greater sciatic notch depth	12	29.60	53.00	40.8042	5.86997
	Greater sciatic notch width	12	15.5	26.7	23.171	3.8333
	Sciatic notch index	12	44.2	68.1	56.949	7.4057
	Acetabulum vertical diameter	14	41.2	52.2	45.500	3.0979
	Sciatic notch-acetabular index	12	34.2	64.8	51.142	8.3453
Male	Coxal max. length	2	218	224	221.00	4.243
	Coxal max. breadth	5	142.0	167.0	156.700	10.3296
	Pubis length	0				
	Ischium length	0				
	Ischium-pubis index	0				
	Greater sciatic notch depth	6	35.30	41.00	38.2000	2.05232
	Greater sciatic notch width	7	16.6	27.0	21.857	3.7004
	Sciatic notch index	6	47.0	66.3	54.815	6.4269
	Acetabulum vertical diameter	9	50.9	62.5	55.056	3.9806
	Sciatic notch-acetabular index	6	31.3	52.1	40.767	8.6639

Significant sexual dimorphism

	Coxal max. length	Acetabulum vertical diameter	Sciatic notch - acetabular index
Mann-Whitney U	.000	2.000	13.500
Z	-2.152	-3.843	-2.108
Asymp. Sig. (2-tailed)	.031	.000	.035
Effect size	-.621	-.801	-.497

Appendix 23
Sexual dimorphism in the lower limbs, Tisza Culture

Femur

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Femur max. head diameter	14	37	45	40.29	2.139
	Femur max. length	12	348	443	405.63	21.512
	Femur circumference midshaft	16	74	90	81.53	3.862
	Femur mediolateral midshaft diameter	15	21	29	24.85	1.585
	Femur anteroposterior midshaft diameter	15	22	28	25.91	1.980
	Femur robustness index	11	11.7	13.9	12.527	.6589
	Femur bicondylar width	7	69.0	75.0	71.800	2.3267
	Greater to lesser trochanter length	7	46.6	77.7	55.600	10.4453
Male	Femur max. head diameter	7	42	52	47.31	3.609
	Femur max. length	6	403	499	450.83	31.340
	Femur circumference midshaft	5	81	95	87.90	5.683
	Femur mediolateral midshaft diameter	10	25	29	26.82	1.367
	Femur anteroposterior midshaft diameter	10	24	36	28.52	3.270
	Femur robustness index	6	11.1	13.7	12.383	.9390
	Femur bicondylar width	5	70.0	90.5	82.000	7.8819
	Greater to lesser trochanter length	5	44.6	65.9	56.900	9.0000

Statistically significant sexual dimorphism

	Femur max. head diameter	Femur max. length	Femur circumference midshaft	Femur ML midshaft diameter	Femur AP midshaft diameter	Femur bicondylar width
Mann-Whitney U	4.000	10.000	15.000	21.500	35.000	4.500
Z	-3.368	-2.436	-2.074	-2.975	-2.223	-2.115
Asymp. Sig. (2-tailed)	.001	.015	.038	.003	.026	.034
Effect size	-.735	-.574	-.453	-.595	-.445	-.611

Patella

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Patella max. breadth	3	38	41	39.47	1.747
	Patella max. length	5	35	37	36.20	.696
Male	Patella max. breadth	3	40	44	42.07	1.563
	Patella max. length	2	38	38	38.35	.071

Tibia

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Tibia max. length	12	303	359	332.75	16.373
	Tibia prox. breadth	9	64	70	67.41	1.842
	Tibia circumference nutrient foramen	14	74	95	84.49	5.729
	Tibia mediolateral midshaft diameter	11	18	22	19.93	1.191
	Tibia anteroposterior midshaft diameter	11	25	30	27.47	1.334
	Tibia distal breadth	9	40.0	48.5	43.133	3.0500
Male	Tibia max. length	8	325	385	364.44	18.859
	Tibia prox. breadth	3	74	85	79.17	5.252
	Tibia circumference nutrient foramen	9	82	104	94.94	7.299
	Tibia mediolateral midshaft diameter	10	18	26	21.95	2.056
	Tibia anteroposterioer midshaft diameter	10	28	37	32.63	2.444
	Tibia distal breadth	5	43.6	63.0	53.060	7.7690

Fibula

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Fibula max. length	6	298.0	325.0	314.000	10.2372
	Fibula midshaft circumference	1	42.5	42.5	42.500	.
	Fibula mediolateral midshaft diameter	2	11	11	10.95	.071
	Fibula anteroposterior midshaft diameter	2	13.5	14.8	14.150	.9192
Male	Fibula max. length	2	360.0	361.0	360.500	.7071
	Fibula midshaft circumference	1	50.0	50.0	50.000	.
	Fibula mediolateral midshaft diameter	2	12	14	12.75	1.061
	Fibula anteroposterior midshaft diameter	2	15.6	20.0	17.800	3.1113

Statistically significant dimensions

	Tibia max. length	Tibia prox. breadth	Tibia circumference nutrient foramen	Tibia ML midshaft diameter	Tibia AP midshaft diameter	Tibia distal breadth	Fibula max. length
Mann-Whitney U	11.000	.000	18.500	18.500	2.000	5.000	.000
Z	-2.856	-2.501	-2.806	-2.579	-3.739	-2.336	-2.000
Asymp. Sig. (2-tailed)	.004	.012	.005	.010	.000	.019	.046
Effect size	-.639	-.722	-.585	-.563	-.816	-.624	-.707

Appendix 24
Sexual dimorphism in the feet, Tisza Culture

Calcaneus and Talus

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Calcaneus max. length	6	68.5	76.5	71.550	3.1305
	Calcaneus max. height	4	37.70	45.00	41.5000	3.03205
	Talus max. width	5	29	46	37.44	6.047
	Talus max. length	5	49	53	50.54	1.467
Male	Calcaneus max. length	5	82.0	88.0	84.400	2.5100
	Calcaneus max. height	4	45.30	54.00	48.4250	3.87847
	Talus max. width	3	46	51	48.13	2.902
	Talus max. length	5	60	64	62.15	1.884

Statistically significant sexual dimorphism

	Calcaneus max. length	Calcaneus max. height	Talus max. width	Talus max. length
Mann-Whitney U	.000	.000	.000	.000
Z	-2.751	-2.309	-2.236	-2.611
Asymp. Sig. (2-tailed)	.006	.021	.025	.009
Effect size	-.829	-.816	-.791	-.826

First metatarsal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MT1 max. length	7	53	60	57.21	2.554
	MT1 proximal mediolateral breadth	4	17	21	19.10	1.685
	MT1 proximal anteroposterior breadth	6	25	27	25.80	.901
	MT1 midshaft mediolateral diameter	9	10	15	12.77	1.233
	MT1 midshaft anteroposterior diameter	9	11	14	12.30	1.153
	MT1 distal mediolateral breadth	4	18	21	19.95	1.303
	MT1 distal anteroposterior breadth	2	19	19	19.20	.283
Male	MT1 max. length	7	59	68	61.83	3.448
	MT1 proximal mediolateral breadth	1	20	20	19.50	.
	MT1 proximal anteroposterior breadth	4	26	28	26.73	.818
	MT1 midshaft mediolateral diameter	7	12	16	14.26	1.575
	MT1 midshaft anteroposterior diameter	5	12	16	13.70	1.530
	MT1 distal mediolateral breadth	1	19	19	18.50	.
	MT1 distal anteroposterior breadth	2	19	21	19.75	1.344

Second metatarsal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MT2 max. length	5	65	72	67.98	3.226
	MT2 proximal mediolateral breadth	6	13	15	13.88	.578
	MT2 proximal anteroposterior breadth	4	19	20	18.98	.465
	MT2 midshaft mediolateral diameter	7	6	9	7.61	.804
	MT2 midshaft anteroposterior diameter	7	8	9	8.56	.331
	MT2 distal mediolateral breadth	6	11	13	11.86	.589
	MT2 distal anteroposterior breadth	3	14	15	14.73	.702
Male	MT2 max. length	3	72	79	74.60	3.812
	MT2 proximal mediolateral breadth	1	14	14	14.00	.
	MT2 proximal anteroposterior breadth	0				
	MT2 midshaft mediolateral diameter	5	7	10	7.65	1.496
	MT2 midshaft anteroposterior diameter	4	8	9	8.60	.490
	MT2 distal mediolateral breadth	0				
	MT2 distal anteroposterior breadth	0				

Third metatarsal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MT3 max. length	6	57.8	68.5	63.383	4.1902
	MT3 proximal mediolateral breadth	6	11.5	13.2	12.383	.7468
	MT3 proximal anteroposterior breadth	4	18	18	18.00	.082
	MT3 midshaft mediolateral diameter	7	5.7	7.9	6.900	.7550
	MT3 midshaft anteroposterior diameter	7	8.4	10.0	9.057	.6973
	MT3 distal mediolateral breadth	7	8.8	11.4	10.086	.8952
	MT3 distal anteroposterior breadth	3	13.8	19.4	15.833	3.0989
Male	MT3 max. length	3	62.0	74.0	67.433	6.0797
	MT3 proximal mediolateral breadth	2	12.8	15.8	14.300	2.1213
	MT3 proximal anteroposterior breadth	1	19	19	19.30	.
	MT3 midshaft mediolateral diameter	5	6.5	10.0	7.560	1.4381
	MT3 midshaft anteroposterior diameter	4	7.0	10.0	8.850	1.3528
	MT3 distal mediolateral breadth	0				
	MT3 distal anteroposterior breadth	1	15.1	15.1	15.100	.

Fourth metatarsal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MT4 max. length	4	62	66	63.72	1.773
	MT4 proximal mediolateral breadth	3	13	13	12.87	.321
	MT4 proximal anteroposterior breadth	3	16.0	17.3	16.433	.7506
	MT4 midshaft mediolateral diameter	4	7	10	8.23	1.607
	MT4 midshaft anteroposterior diameter	4	7	10	8.69	1.388
	MT4 distal mediolateral breadth	4	9.7	10.7	10.125	.4646
	MT4 distal anteroposterior breadth	2	13.3	13.4	13.350	.0707
Male	MT4 max. length	3	64	74	68.23	5.326
	MT4 proximal mediolateral breadth	3	14	15	14.73	.451
	MT4 proximal anteroposterior breadth	2	16.3	19.0	17.650	1.9092
	MT4 midshaft mediolateral diameter	6	7	10	8.10	1.576
	MT4 midshaft anteroposterior diameter	5	7	11	8.96	1.557
	MT4 distal mediolateral breadth	1	11.2	11.2	11.200	.
	MT4 distal anteroposterior breadth	1	13.8	13.8	13.800	.

Fifth metatarsal

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	MT5 max. length	6	61.6	68.0	64.683	2.9233
	MT5 proximal mediolateral breadth	4	18.4	20.0	19.100	.7789
	MT5 proximal anteroposterior breadth	3	13	15	13.80	1.114
	MT5 midshaft mediolateral diameter	5	9	11	10.40	.834
	MT5 midshaft anteroposterior diameter	5	7	8	7.20	.212
	MT5 distal mediolateral breadth	3	10.5	12.2	11.233	.8737
	MT5 distal anteroposterior breadth	1	11.9	11.9	11.900	.
Male	MT5 max. length	2	70.7	77.5	74.100	4.8083
	MT5 proximal mediolateral breadth	1	21.3	21.3	21.300	.
	MT5 proximal anteroposterior breadth	1	15	15	14.90	.
	MT5 midshaft mediolateral diameter	4	8	12	9.93	1.513
	MT5 midshaft anteroposterior diameter	3	7	9	7.80	1.058
	MT5 distal mediolateral breadth	0				
	MT5 distal anteroposterior breadth	0				

First proximal and distal phalanges

Sex		N	Minimum	Maximum	Mean	Std. Deviation
Female	Foot first proximal phalanx max. length	4	31	34	32.98	1.674
	Foot first proximal phalanx proximal anteroposterior breadth	1	15.8	15.8	15.800	.
	Foot first proximal phalanx midshaft anteroposterior diameter	4	8	9	8.35	.723
	Foot first proximal phalanx proximal mediolateral breadth	4	17	19	18.20	1.299
	Foot first proximal phalanx midshaft mediolateral diameter	4	11	13	11.78	.842
	Foot first proximal phalanx distal mediolateral breadth	3	14	15	14.73	.643
	Foot first proximal phalanx distal anteroposterior breadth	1	8.9	8.9	8.900	.
	Foot first distal phalanx max. length	3	22	24	22.50	1.323
	Foot first distal phalanx midshaft mediolateral diameter	3	8	12	9.57	1.779

Male	Foot first proximal phalanx max. length	2	34	35	34.30	.990
	Foot first proximal phalanx proximal anteroposterior breadth	2	16.5	17.1	16.800	.4243
	Foot first proximal phalanx midshaft anteroposterior diameter	3	10	10	9.77	.208
	Foot first proximal phalanx proximal mediolateral breadth	2	19	23	21.00	2.828
	Foot first proximal phalanx midshaft mediolateral diameter	3	12	14	13.20	.917
	Foot first proximal phalanx distal mediolateral breadth	2	16	18	17.20	1.131
	Foot first proximal phalanx distal anteroposterior breadth	1	13.6	13.6	13.600	.
	Foot first distal phalanx max. length	2	21	27	23.85	4.031
	Foot first distal phalanx midshaft mediolateral diameter	2	10	10	9.75	.354

Test Statistics(b)

	MT1 max. length	MT2 max. length	MT4 proximal ML breadth	MT5 max length	Foot first proximal phalanx midshaft AP diameter
Mann-Whitney U	5.500	.000	.000	.000	.000
Z	-2.441	-2.249	-1.964	-2.000	-2.121
Asymp. Sig. (2-tailed)	.015	.024	.050	.046	.034
Effect size	-.652	-.795	-.802	-.707	-.802

Appendix 25
Measurements of unidentified individuals

Colour-coded for sex estimation using new data set from table 5.8

Ref #	Skull						Mandible							Scapula	Humerus	Radius				
	Maximum Length	Maximum Breadth	Minimum Frontal breadth	Mastoid length	Orbital height	Palatal breadth	Maximum length of mandible	Bicondylar breadth	Bigonial breadth	Height of ascending ramus	Min. Breadth ascending ramus	Height of mandibular symphysis	Gonial angle	Glenoid cavity length	Vertical Head diameter	Head maximum diameter	Maximum Length	Mishaft medio-lateral diameter	Mishaft antero-posterior diameter	Distal breadth
HGO-03																				
HGO-11																				
HGO-13																	219.0	14.1	11.0	30.4
HGO-16																				
HGO-20																				
HGO-32																				
HGO-47																	211.0	12.4	9.6	25.4
HGO-74																				
HGO-75															41.6					
HGO-76																				
HGO-78																				
HGO-82																				
HGO-51 (M/F)			92.1	30.9										35.0	39.5					29.3
HKS-02 (M/F)	195.0	150.0		22.0	31.0	32.0	69.0	108.5	93.5	51.5	31.0	32.0	128.5							

Ref #	Ulna		MC1							MC2							MC3						
	Circumference midshaft	Proximal ulna inferior medial trochlear notch width	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter
HGO-03																							
HGO-11																							
HGO-13																							
HGO-16																							
HGO-20																							
HGO-32																							
HGO-47		12.5	38.4	12.0	11.5	9.3	6.6	13.0	9.4	58.2	14.0	13.8	6.8	6.9	11.2	11.0	57.7	11.8	12.7	10.0	7.2	12.2	10.7
HGO-74																							
HGO-75																							
HGO-76																							
HGO-78																							
HGO-82																							
HGO-51 (M/F)	48.0		44.7	15.6		10.5	7.1			66.5	17.0	17.0	7.5	7.7		14.3	63.9		17.7	7.6	8.2	12.7	
HKS-02 (M/F)																							

Ref #	MC4							MC5							Hand First Proximal					Pelvis	Femur							
	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L diameter	Midshaft A/P diameter	Acetabulum vertical diameter	Maximum head diameter	Maximum length	Circumference Midshaft	M/L (transverse) midshaft diameter	A/P (sagittal) midshaft diameter	Robustness index	Bicondylar width
HGO-03																											
HGO-11																											
HGO-13																											
HGO-16																											
HGO-20																							94.0				
HGO-32																											
HGO-47	50.1	10.8	9.2	5.8	5.7	10.0	10.0	46.8	12.2	9.0	6.6	5.0	8.9	8.9	25.9	12.7	8.4	6.9	4.8	47.5	38.3	383.0		22.7	23.0		62.6
HGO-74																					44.0	420.0	86.0	26.9	28.4		
HGO-75																											
HGO-76																				48.4							
HGO-78																											
HGO-82																					43.9						
HGO-51 (M/F)		11.0	10.7	6.0	6.1						8.0	5.1			6.4								90.0				
HKS-02 (M/F)																											

Ref #	Patella		Tibia						Calcaneus	Talus		MT1						
	Width	Height	Maximum length	Proximal breadth	Circumference at nutrient foramen	M/L (transverse) midshaft diameter	A/P (sagittal) midshaft diameter	Distal breadth	Maximum length	Maximum width	Maximum length	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter
HGO-03									75.6	44.0	54.4							
HGO-11								43.8	75.6	44.0	54.4						19.5	18.2
HGO-13		44.7																
HGO-16	49.4	44.8										67.4	22.2	31.0	16.7	15.3		22.9
HGO-20															14.9	14.8		
HGO-32					83.0	18.0	26.5	42.0			56.2	58.0		26.3	12.0	13.9	19.0	18.3
HGO-47			319.0	59.1	75.0	19.9	25.0	40.1										
HGO-74					95.0													
HGO-75																		
HGO-76																		
HGO-78	37.8	33.8																
HGO-82																		
HGO-51 (M/F)																		
HKS-02 (M/F)																		

Ref #	MT2							MT3							MT4						
	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter
HGO-03																					
HGO-11				9.2	9.7	13.5	14.8	71.6	13.9	19.8	7.7	9.6	11.1	13.7	71.5	13.7	17.2			10.3	13.0
HGO-13																					
HGO-16	77.7			9.4	8.4	13.8	18.9											11.0	9.6		
HGO-20									15.8	20.0					69.7	15.9	19.6	8.7	10.4		
HGO-32	74.0	16.0	19.0	7.0	11.0			72.5	12.0		7.0	10.5									
HGO-47									12.4	17.8					60.4	11.4	12.6	6.8	7.7	9.0	11.0
HGO-74																					
HGO-75																					
HGO-76																					
HGO-78																					
HGO-82																					
HGO-51 (M/F)																					
HKS-02 (M/F)																					

Ref #	MT5							Foot first proximal phalanx						
	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter	Maximum length	Base M/L breadth	Base A/P breadth	Midshaft M/L (maximum) diameter	Midshaft A/P diameter	Head M/L diameter	Head A/P diameter
HGO-03														
HGO-11		19.8	14.0											
HGO-13														
HGO-16														
HGO-20	75.0	24.8	17.3	12.1	9.0	12.6	13.0	34.2	20.5	18.8	12.8	10.0	18.2	11.2
HGO-32														
HGO-47		15.0	10.2											
HGO-74														
HGO-75														
HGO-76														
HGO-78														
HGO-82														
HGO-51 (M/F)														
HKS-02 (M/F)														

Appendix 26
Adult age estimates

ID	Sex	Skeletal and dental development	Pubic symphysis (Todd 1920)	Pubic symphysis (Brooks and Suchey 1990)	Auricular surface (Lovejoy et al. 1985)	Tooth wear (Smith 1984)	Tooth wear (Brothwell 1981)	Acetabulum (Rissech et al. 2006)	Age category
DOL-01	F	Fully mature		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phase 8 = 60+ yrs	6-7	45+ yrs	c. 65 yrs	OA
DOL-02	F	Fully mature				7	45+ yrs		A
HBP-01	M	Adult				5-6			A
HKJ-01	M	Adult					45+ yrs		A
HKO-01	M								?
HKO-02	M	Adult				2-3	17-25 yrs		A
HKO-03	F								?
HKO-04	F								?
HKO-05	M	17+ yrs				8	45+ yrs		A
HKO-06	M	Adult				4	25-35 yrs		A
HKO-07	F	Adult				4-5	25-35 yrs		A
HKO-08	M	Adult							A
BKP-01	M	Fully mature	Phase 9 = 44-50 yrs	Phases 5 to 6 = c.45 to 60 yrs *[27-86 yrs]*	Phases 7 to 8 = 50 to 60+ yrs		25-35 yrs	c. 33 yrs	OA
BKP-02	M	Fully mature			Phases 7 to 8 = 50 to 60+ yrs	6-7	45+ yrs		OA
BKP-03	F	18-19 yrs					17-25 yrs		YA
BKP-04	M	Fully mature	Phase 10 = 50+ yrs		Phase 8 = 60+ yrs	6-7	35-45 yrs		OA
BKP-05	M	Early 20s	Phase 3 = 22-24 yrs	Phase 2 = c. 23 yrs *[19-34 yrs]*		4	17-25 yrs		YA
DOR-01	M	Late teens, early 20s				6	35-45 yrs		YA
HGO-01	M	17-22 yrs				2	17-25 yrs		YA
HGO-03	F	At least adolescent, probably adult							?
HGO-04	F	Elderly Adult		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phase 8 = 60+ yrs	6	35-45 yrs		OA
HGO-05	F	21-23 yrs		Phase 2 = c. 25 yrs *[19-40 yrs]*				c. 28 yrs	YA
HGO-07	?	prob adult, at least ado							?
HGO-08	F	17-22 yrs		Phases 1 to 2 = c. 20 to 25 yrs *[15-40 yrs]*	Phase 1 = 20 to 24 yrs		17-25 yrs	c. 36 yrs	YA
HGO-10	M	Young adult < 25 yrs	Phase 1 =18-19 yrs	Phase 1 = c. 18.5 yrs *[15-23 yrs]*		2-3	17-25 yrs		YA
HGO-11	F	adult							A
HGO-12	F	Fully mature				6	25-35 yrs	c. 56 yrs	MA
HGO-13	F	25-30 yrs		Phase 3 = c. 30 yrs *[21-53 yrs]*			25-35 yrs		YA
HGO-15	M	Adult							A

ID	Sex	Skeletal and dental development	Pubic symphysis (Todd 1920)	Pubic symphysis (Brooks and Suchey 1990)	Auricular surface (Lovejoy et al. 1985)	Tooth wear (Smith 1984)	Tooth wear (Brothwell 1981)	Acetabulum (Rissech et al. 2006)	Age category
HGO-16	M	Adult							A
HGO-17	M	Young adult, 25+					17-25 yrs	c. 26 yrs	YA
HGO-19	F	Fully mature		Phase 3 = c. 30 yrs *[21-53 yrs]*	Phase 3 = 30 to 34 yrs	5	25-35 yrs	c. 36 yrs	MA
HGO-20	M	Adult							A
HGO-21	F	Early 20s		Phase 1 = c. 19 yrs *[15-24 yrs]*	Phase 2 = 25 to 29 yrs		17-25 yrs	c. 27 yrs	YA
HGO-22	M	Fully mature	Phase 10 = 50+ yrs	Phase 6 = c. 61 yrs *[34-86 yrs]*	Phase 8 = 60+ yrs		45+ yrs	c. 49 yrs	OA
HGO-23	F	Early 20s			Phases 2 to 3 = 25-34 yrs			c. 38 yrs	YA
HGO-24	F	Fully mature		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phase 8 = 60+ yrs		25-35 yrs	c. 43 yrs	OA
HGO-27	M/F	Late teens, early 20s		Phase 1 = c. 19 yrs *[15-24 yrs]*			17-25 yrs	c. 23 yrs	YA
HGO-28	F	Fully mature			Phase 6 = 45 to 49 years		35-45 yrs, maybe 45+	c. 37 yrs	MA
HGO-30	F	Fully mature		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phase 8 = 60+ yrs	5	25-45 yrs		OA
HGO-32	F	prob adult, at least ado							?
HGO-34	F	Elderly Adult		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phases 7 to 8 = 50 to 60+ yrs	6-7		c. 40 yrs	OA
HGO-35	F	Fully mature			Phases 7 to 8 = 50 to 60+ yrs	6	35-45 yrs		OA
HGO-38	F	Fully mature		Phase 6 = c. 60 yrs *[42-87 yrs]*		6	35-45 yrs	c. 45 yrs	OA
HGO-39	F	Late 20s early 30s		Phases 2 to 3 = c. 25 to 30 yrs *[19-53 yrs]*	Phases 2 to 3 = 25-34 yrs	4	25-35 yrs	c. 39 yrs	YA
HGO-40	F	adult							A
HGO-41	M	> 23 yrs			Phases 3 to 4 = 30-39 yrs	4-6	25-35 yrs	c. 48 yrs	A
HGO-44	F	adult				4			A
HGO-46	F	adult		Phase 4 = c. 38 yrs *[26-70 yrs]*	Phase 8 = 60+ years	7	35-45 yrs	c. 51 yrs	A
HGO-48	F	Early 20s				2	17-25 yrs		YA
HGO-51	F	Elderly Adult		Phase 6 = c. 60 yrs *[42-87 yrs]*	Phases 7 to 8 = 50 to 60+ yrs	8	45+ yrs		OA
HGO-52	M	Adult				5	25-35 yrs		A
HGO-53	M	19-20 yrs	Phase 1 =18-19 yrs	Phase 1 = c. 18.5 yrs *[15-23 yrs]*	Phases 1 to 2 = 20 to 29 years	1-2	17-25 yrs	c. 23 yrs	YA

ID	Sex	Skeletal and dental development	Pubic symphysis (Todd 1920)	Pubic symphysis (Brooks and Suchey 1990)	Auricular surface (Lovejoy et al. 1985)	Tooth wear (Smith 1984)	Tooth wear (Brothwell 1981)	Acetabulum (Rissech et al. 2006)	Age category
HGO-56	F	In her 20s			Phases 1 to 2 = 20 to 29 years	3-4	17-25 yrs	c. 35 yrs	YA
HGO-68	M	Adult				5	25-35 yrs		A
HGO-69	?	14+ yrs							?
HGO-73	?	11+ yrs							?
HGO-74	M	14+ yrs							?
HGO-75	F	22+ yrs							A
HGO-76	F	17+ yrs						c. 59 yrs	A
HGO-78	?								?
HGO-79	?	14+ yrs							?
HGO-81	?	>12 yrs							?
HGO-82	M	>12 yrs							?
HGO-84	M								?
HKS-01	F	Mature adult							A
HKS-02	F	Young adult							YA
HKS-03	M	Mature adult					35-45, 45+		A
HKV-01	M	Adult							A
HZB-01	F	adult							A
OSZ-01	F	18-24 yrs				3-4	25-35 yrs		YA

Appendix 27
Age estimates from the acetabulum

ID	Sex	Age category	Groove	Rim shape	Rim porosity	Apex cavity	Outer edge activity	Fossa activity	Fossa porosity	Average
DOL-01	F	**OA**	50.1	68.1	69.7	75.3	58.3	63.8	67.5	**64.7**
BKP-01	M	**OA**	50.1	21.0	31.1	38.2	22.6	33.9	34.3	**33.0**
HGO-05	F	**YA**	26.9	21.0		26.6	22.6	33.9	34.3	**27.6**
HGO-08	F	**YA**	26.9	34.7	55.3	26.6	22.6	33.9	48.7	**35.5**
HGO-12	F	**MA**	45.9	55.3	65.8					**55.7**
HGO-17	M	**YA**	26.9	34.7	21.5		22.6			**26.4**
HGO-19	F	**MA**	41.6	25.6	21.5	59.4	22.6	33.9	48.7	**36.2**
HGO-21	F	**YA**	41.6	21.0	31.1	26.6	22.6	23.3	21.6	**26.8**
HGO-22	M	**OA**	41.6	60.3	55.3	75.3	27.2	33.9	48.7	**48.9**
HGO-23	F	**YA**	41.6	45.9	31.1	26.6	22.6	48.1	48.7	**37.8**
HGO-24	F	**OA**	50.1	34.7	55.3		22.6	48.1	48.7	**43.3**
HGO-27	M/F	**YA**	26.9	21.0	21.5		22.6	23.3	21.4	**22.8**
HGO-28	F	**MA**	26.9	45.9	31.1	59.4	22.6			**37.2**
HGO-34	F	**OA**	41.6		39.0	65.8	22.6	33.9	34.3	**39.5**
HGO-38	F	**OA**	41.6	60.3	55.3	38.2	22.6	48.1	48.7	**45.0**
HGO-39	F	**YA**	41.6	45.9	55.3	26.6	22.6	48.1	34.3	**39.2**
HGO-41	M	**A**	50.1	60.3	55.3	38.2	22.6	63.8	48.7	**48.4**
HGO-46	F	**A**	50.1	60.3	55.3	59.4	22.6	62.5	48.7	**51.3**
HGO-53	M	**YA**	26.9	21.0	21.5	26.6	22.6	23.3	21.4	**23.3**
HGO-56	F	**YA**	50.1	25.6	55.3		22.6	33.9	21.6	**34.9**
HGO-76	F	**A**	71.2	45.9	69.7	75.3	22.6	62.5	62.7	**58.6**

Calculated from estimates by Rissech *et al.* 2006

Appendix 28
Correlation of age and dental wear

Crosstabulation of age group and Smith (1984) Dental wear

			Smith dental wear							Total
			2	3	4	5	6	7	8	2
Age group	YA	Count	3	1	4	0	1	0	0	9
		% within Age group	33.3%	11.1%	44.4%	.0%	11.1%	.0%	.0%	100.0%
		% within Smith dental wear	100.0%	100.0%	100.0%	.0%	20.0%	.0%	.0%	45.0%
		% of Total	15.0%	5.0%	20.0%	.0%	5.0%	.0%	.0%	45.0%
	MA	Count	0	0	0	1	1	0	0	2
		% within Age group	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
		% within Smith dental wear	.0%	.0%	.0%	50.0%	20.0%	.0%	.0%	10.0%
		% of Total	.0%	.0%	.0%	5.0%	5.0%	.0%	.0%	10.0%
	OA	Count	0	0	0	1	3	4	1	9
		% within Age group	.0%	.0%	.0%	11.1%	33.3%	44.4%	11.1%	100.0%
		% within Smith dental wear	.0%	.0%	.0%	50.0%	60.0%	100.0%	100.0%	45.0%
		% of Total	.0%	.0%	.0%	5.0%	15.0%	20.0%	5.0%	45.0%
Total		Count	3	1	4	2	5	4	1	20
		% within Age group	15.0%	5.0%	20.0%	10.0%	25.0%	20.0%	5.0%	100.0%
		% within Smith dental wear	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	15.0%	5.0%	20.0%	10.0%	25.0%	20.0%	5.0%	100.0%

Correlations

			Smith dental wear	Age group
Spearman's rho	Smith dental wear	Correlation Coefficient	1.000	.832(**)
		Sig. (2-tailed)	.	.000
		N	20	20
	Age group	Correlation Coefficient	.832(**)	1.000
		Sig. (2-tailed)	.000	.
		N	20	30

** Correlation is significant at the 0.01 level (2-tailed).

Crosstabulation of age group with Brothwell dental wear

			Brothwell dental wear				Total
			17-25 yrs	25-35 yrs	35-45 yrs	45+ yrs	17-25 yrs
Age group	YA	Count	11	3	1	0	15
		% within Age group	73.3%	20.0%	6.7%	.0%	100.0%
		% within Brothwell dental wear	100.0%	37.5%	16.7%	.0%	51.7%
		% of Total	37.9%	10.3%	3.4%	.0%	51.7%
	MA	Count	0	2	1	0	3
		% within Age group	.0%	66.7%	33.3%	.0%	100.0%
		% within Brothwell dental wear	.0%	25.0%	16.7%	.0%	10.3%
		% of Total	.0%	6.9%	3.4%	.0%	10.3%
	OA	Count	0	3	4	4	11
		% within Age group	.0%	27.3%	36.4%	36.4%	100.0%
		% within Brothwell dental wear	.0%	37.5%	66.7%	100.0%	37.9%
		% of Total	.0%	10.3%	13.8%	13.8%	37.9%
Total		Count	11	8	6	4	29
		% within Age group	37.9%	27.6%	20.7%	13.8%	100.0%
		% within Brothwell dental wear	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	37.9%	27.6%	20.7%	13.8%	100.0%

Correlations

			Age group	Brothwell dental wear
Spearman's rho	Age group	Correlation Coefficient	1.000	.792(**)
		Sig. (2-tailed)	.	.000
		N	30	29
	Brothwell dental wear	Correlation Coefficient	.792(**)	1.000
		Sig. (2-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.01 level (2-tailed).

Appendix 29
Measurements for stature estimation

ID	Period	Sex	Humerus	Radius	Ulna	Femur	Tibia	Fibula
DOL-01	Körös	F	298.5	234	261	411	345	332.5
DOL-02	Körös	F	269	211	224	389.3	316	302
BKP-01	Tisza	M	325.8	251	275	449	380	
BKP-02	Tisza	M	337.5	250.5	270			
BKP-03	Tisza	F	302	226	253			
BKP-04	Tisza	M	328		278	438	385	
BKP-05	Tisza	M	330	251	276	462	373	360
HGO-01	Tisza	M					357	
HGO-04	Tisza	F						298
HGO-05	Tisza	F	296	223	245	413.5	347	
HGO-08	Tisza	F	309			443	345	
HGO-10	Tisza	M	312		263			
HGO-12	Tisza	F	278	202				
HGO-13	Tisza	F		219				
HGO-17	Tisza	M	301	235	257			
HGO-19	Tisza	F	284			407	329	
HGO-21	Tisza	F	282	214	240	405	326	309
HGO-22	Tisza	M	324			454	372	361
HGO-23	Tisza	F				395	303	
HGO-24	Tisza	F	296			401	327	
HGO-26	Tisza	F		202	230	414		325
HGO-30	Tisza	F			245	410		319
HGO-34	Tisza	F	246	193.5	213			
HGO-35	Tisza	F	287.5	207	228	407	337	
HGO-38	Tisza	F	287.5	220	245		345	
HGO-39	Tisza	F	287	212	232	413	324	310
HGO-40	Tisza	F	295	242			359	
HGO-46	Tisza	F	259	207	228	348	309	
HGO-47	Tisza	F		211		383	319	
HGO-48	Tisza	F	251	184.5	205			
HGO-52	Tisza	M					366	
HGO-53	Tisza	M		235	260		358	
HGO-56	Tisza	F	297	228		411	343	323
HGO-74	Tisza	M				420		
HKK-04	Tisza	M	342	264		499		

All dimensions are maximum lengths in mm

Appendix 30
Results of stature estimations for males and females

ID	Period	Sex	Average from all sex-specific means (Trotter & Gleser)	Average from all means (Sjøvold)	Estimation from results with the least standard error (Trotter & Gleser)	Estimation from results with the least standard error (Sjøvold)
DOL-01	Körös	Female	161.2	160.1	156.7	155.3
DOL-02	Körös	Female	151.5	149.5	148.1	144.7
Female average from Körös culture			**156.3**	**154.8**	**152.4**	**150.0**
BKP-03	Tisza	Female	162.4	160.7	162.1	158.0
HGO-04	Tisza	Female	146.9	143.3	146.9	143.3
HGO-05	Tisza	Female	159.2	158.6	162.2	161.5
HGO-08	Tisza	Female	162.1	162.2	161.6	160.9
HGO-12	Tisza	Female	151.0	149.3	150.7	147.4
HGO-13	Tisza	Female	158.7	157.5	158.7	157.5
HGO-19	Tisza	Female	155.3	154.7	156.9	155.6
HGO-21	Tisza	Female	155.3	153.8	150.2	147.2
HGO-23	Tisza	Female	150.2	149.0	149.4	147.0
HGO-24	Tisza	Female	155.6	155.0	156.2	154.8
HGO-26	Tisza	Female	154.0	154.0	154.8	153.0
HGO-30	Tisza	Female	156.9	155.9	153.1	150.8
HGO-34	Tisza	Female	145.7	143.3	146.7	132.7
HGO-35	Tisza	Female	155.4	154.3	159.3	158.2
HGO-38	Tisza	Female	158.5	156.4	161.6	160.9
HGO-39	Tisza	Female	155.1	153.3	150.4	147.6
HGO-40	Tisza	Female	164.1	162.3	165.6	165.5
HGO-46	Tisza	Female	148.9	146.5	151.1	149.0
HGO-47	Tisza	Female	151.4	151.0	154.0	152.3
HGO-48	Tisza	Female	143.3	140.2	142.4	135.0
HGO-56	Tisza	Female	157.9	157.2	154.3	152.3
Female average from Tisza culture			**154.7**	**153.3**	**154.7**	**151.9**
BKP-01	Tisza	Male	173.8	170.5	169.7	172.4
BKP-02	Tisza	Male	175.4	172.0	175.6	174.9
BKP-04	Tisza	Male	173.8	171.0	167.2	174.0
BKP-05	Tisza	Male	173.4	170.3	169.1	165.6
HGO-01	Tisza	Male	168.3	164.8	168.3	164.8
HGO-10	Tisza	Male	171.4	165.6	168.3	163.1
HGO-17	Tisza	Male	168.6	162.6	165.1	158.1
HGO-22	Tisza	Male	170.7	167.8	169.4	165.9
HGO-52	Tisza	Male	170.5	167.8	170.5	167.8
HGO-53	Tisza	Male	170.4	165.0	168.6	165.1
HGO-74	Tisza	Male	163.0	159.7	163.0	159.7
HKK-04	Tisza	Male	179.0	177.3	181.3	181.0
Male average from Tisza culture			**171.5**	**167.9**	**169.7**	**167.7**

Appendix 31
Catalogue of human remains analysed for this doctorate

BKP - 01 **Site** Békés-Povádzug **Period** Tisza Grave 1 # 2249

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 50+, probably 60+ years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☒ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 171 cm

BKP - 02 **Site** Békés-Povádzug **Period** Tisza Grave 42 # 2290

Juvenile ○ yes ◉ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 50+, possibly 60+ years

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 172 cm

BKP - 03 **Site** Békés-Povádzug **Period** Tisza Grave 43 # 2291

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 18-19 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 161 cm

BKP - 04 **Site** Békés-Povádzug **Period** Tisza Grave 44 **#** 2292

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 60+ years

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 171 cm

BKP - 05 **Site** Békés-Povádzug **Period** Tisza Grave 46 **#** 2294

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 170 cm

DOL - 01 **Site** Deszk-Olajkút **Period** Körös Grave 5 **#** 5253

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 60+

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 160 cm

DOL - 02 **Site** Deszk-Olajkút **Period** Körös Grave 6 **#** 5254

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Mature to elderly

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 150 cm

DOR - 01 **Site** Deszk-Ordos **Period** Tisza Grave 1 **#** 9069

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late teens, early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HBP - 01 **Site** Hódmezővásárhely-Bodzáspart **Period** Körös Grave **#** 158

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 01 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 2 **#** 8999

Juvenile ○ yes ◉ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** late teens, early 20s

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 165 cm

HGO - 02 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 3 **#** 9000

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** ~6 months

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 03 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 3a **#** ?

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** At least ado, prob. adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 04 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 4 **#** 9001

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 60+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 143 cm

HGO - 05 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 5 **#** 9002

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Early 20s

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 159 cm

HGO - 06 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 7 **#** 9003

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** ~5 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☒ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 07 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 8 **#** 9004

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** At least ado, prob. adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 08 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 10 **#** 9005

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late teens to early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 162 cm

HGO - 09 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 11 **#** 9006

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 8 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature cm

HGO - 10 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 12 **#** 9007

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late teens, early 20s

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☒ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 166 cm

HGO - 11 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 15 **#** 9008

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☒ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 12 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 16 **#** 9009

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ◉ mature adult ○ unknown **Age** Mature adult

Skeletal Pathology
- ☒ Trauma
- ☒ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 149 cm

HGO - 13 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 17 **#** 9010

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 157 cm

HGO - 14 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 17a **#** 9010

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ◉ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** neonate (10 lunar months)

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 54 cm

HGO - 15 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 18 **#** 9011

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 16 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 19 **#** 9012

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 17 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 20 **#** 9013

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 163 cm

HGO - 19 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 24 **#** 9014

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ◉ mature adult ○ unknown **Age** Mature adult

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 155 cm

HGO - 20 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 25 **#** 9015

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 21 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 26 **#** 9705

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 154 cm

HGO - 22 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 27 **#** 9706

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 60+ yrs

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 168 cm

HGO - 23 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 28 **#** 9707

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 149 cm

HGO - 24 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 29 **#** 9708

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 60+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 155 cm

HGO - 25 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 30 **#** 9709

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** ~10 months

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 71 cm

HGO - 26 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 31 **#** 9710

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ◉ adolescent ○ mature adult ○ unknown **Age** late teens, nearly YA

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 154 cm

HGO - 27 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 32 **#** 9711

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ◉ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** late teens / early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 155 cm

HGO - 28 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 33 **#** 9712

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ◉ mature adult ○ unknown **Age** Mature adult

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 30 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 35 **#** 9714

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Fully mature, prob. old, poss. 60+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 156 cm

HGO - 31 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 37 **#** 9715

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ◉ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** neonate (10 lunar months)

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 51 cm

HGO - 32 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 39 **#** 9716

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** At least adolescent, probably adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 33 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 40 **#** 9717

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** ~6 months

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 63 cm

HGO - 34 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 41 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** probably 50+, possibly 60+.

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 143 cm

HGO - 35 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 43 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** probably 50+, possibly 60+.

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 154 cm

HGO - 36 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 44 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** child

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 37 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 45 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** fetus/infant

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 38 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 46 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** possibly 60+

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 156 cm

HGO - 39 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 47 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Late 20s, early 30s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 153 cm

HGO - 40 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 48 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 162 cm

HGO - 41 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 49 **#**

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** possibly in his 30s

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 42 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 50 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** ~ 9 months

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 70 cm

HGO - 43 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 51 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** 6 months

Skeletal Pathology
- ☐ Trauma
- ☒ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 44 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 53 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 45 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 54 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 11 -12 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 46 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 56 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Mature or elderly

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 147 cm

HGO - 47 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 57 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ◉ adolescent ○ mature adult ○ unknown **Age** late teens

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 151 cm

HGO - 48 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 58 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** Early 20s

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 140 cm

HGO - 49 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 59 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** ~2.5 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 82 cm

HGO - 50 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 60 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ◉ adolescent ○ mature adult ○ unknown **Age** 12-15 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 125 cm

HGO - 51 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 61 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ◉ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ◉ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** probably 60+

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 52 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 63 **#**

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 168 cm

HGO - 53 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 64 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 19-20 yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 165 cm

HGO - 54 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 66 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 11-12 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 130 cm

HGO - 55 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 67 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ◉ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** neonate (10 lunar months)

Skeletal Pathology
- ☐ Trauma
- ☒ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 50 cm

HGO - 56 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 68 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ◉ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** In her 20s

Skeletal Pathology
- ☒ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 157 cm

HGO - 57 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 69 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** around 6 months old

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 65 cm

HGO - 68 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.26

Juvenile ○ yes ◉ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 69 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.27

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 14+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 70 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** ?

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** ~ 3 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 91 cm

HGO - 73 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.28

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 11+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 74 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave ? **#** ?

Juvenile ○ yes ○ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 14+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 160 cm

HGO - 75 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.8

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 22+ yrs

Skeletal Pathology
- ☐ Trauma
- ☒ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 76 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave ? **#** ?

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 17+ yrs

Skeletal Pathology
- ☐ Trauma
- ☒ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 78 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.18

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 79 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.17

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** 14+ yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 81 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.13

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Older than 12 yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 82 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.19

Juvenile ○ yes ○ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Older than 12 yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 84 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.11

Juvenile ○ yes ○ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Probably an adult, at least adolescent

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 86 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave **#** sz.8

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HGO - 87 **Site** Hódmezővásárhely-Gorzsa **Period** Tisza Grave 59 **#**

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** ? (older than 3)

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKJ - 01 **Site** Hódmezővásárhely-Kovacs J. tanyája **Period** Körös Grave ? **#** 3307

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ◉ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature cm

HKK - 01 **Site** Hódmezővásárhely-Kökénydomb **Period** Tisza Grave 1 **#** 9613

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** ~ 7 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☒ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 104 cm

HKK - 02 **Site** Hódmezővásárhely-Kökénydomb **Period** Tisza Grave 2a **#** 9614

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 4 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKK - 03 **Site** Hódmezővásárhely-Kökénydomb **Period** Tisza Grave 2b **#** 9615

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ◉ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 5-7 years

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 102 cm

HKK - 04 **Site** Hódmezővásárhely-Kökénydomb **Period** Tisza Grave 3 **#** 9616

Juvenile ◉ yes ○ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ◉ adolescent ○ mature adult ○ unknown **Age** ~17 yrs

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature 177 cm

HKO - 01 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 3/5 **#** 111

Juvenile ○ yes ○ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKO - 02 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 3/8 **#** 112

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ◉ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Probably young adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☒ Gum resorption
- ☐ LEH/ NSSI
- ☐ AMTL
- ☒ Calculus
- ☒ Periodontal disease
- ☐ Abscess
- ☐ Anomaly/anat.variation

Stature cm

HKO - 03 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave ? **#** 113

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ Gum resorption
- ☐ LEH/ NSSI
- ☐ AMTL
- ☐ Calculus
- ☐ Periodontal disease
- ☐ Abscess
- ☐ Anomaly/anat.variation

Stature cm

HKO - 04 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 3/3 **#** 116

Juvenile ○ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ Gum resorption
- ☐ LEH/ NSSI
- ☐ AMTL
- ☐ Calculus
- ☐ Periodontal disease
- ☐ Abscess
- ☐ Anomaly/anat.variation

Stature cm

HKO - 05 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave ? **#** 130

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ◉ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKO - 06 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 25/1 **#** 131

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☒ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKO - 07 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 25/2 **#** 132

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKO - 08 **Site** Hódmezővásárhely-Kotac **Period** Körös Grave 6/1 **#** 133

Juvenile ○ yes ◉ no **Sex** ○ M ◉ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKS - 01 **Site** Hódmezővásárhely-Kökénydomb, Szabo-tanya **Period** Tisza Grave 1 **#** 160

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** mature to elderly

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☒ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKS - 02 **Site** Hódmezővásárhely-Kökénydomb, Szabo-tanya **Period** Tisza Grave 2 **#** 161

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ◉ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age**

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☒ Caries
- ☒ LEH/ NSSI
- ☒ Calculus
- ☒ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

HKS - 03 **Site** Hódmezővásárhely-Kökénydomb, Szabo-tanya **Period** Tisza Grave 3 **#** 162

Juvenile ○ yes ◉ no **Sex** ◉ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** Mature to elderly

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature cm

HKS - 04 **Site** Hódmezővásárhely-Kökénydomb, Szabo-tanya **Period** Tisza Grave 7 **#** 2886

Juvenile ◉ yes ○ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ○ F? ○ F ◉ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ◉ infant ○ adolescent ○ mature adult ○ unknown **Age** ~1 year

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☒ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☐ Anomaly/anat.variation

Stature 76 cm

HKV - 01 **Site** Hódmezővásárhely-Kökénydomb, Vörös-tanya **Period** Tisza Grave 159 **#**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ◉ M?? ○ M/F ○ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☒ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☒ LEH/ NSSI
- ☐ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☐ AMTL
- ☒ Periodontal disease
- ☒ Anomaly/anat.variation

Stature cm

HZB - 01 **Site** Hódmezővásárhely-Z. Berhaz **Period** Neolithic Grave **# 2174**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ◉ F?? ○ F? ○ F ○ ?

Age class ○ neonate ○ child ○ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ◉ unknown **Age** adult

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☐ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☐ Gum resorption
- ☒ AMTL
- ☒ Periodontal disease
- ☐ Anomaly/anat.variation

Stature cm

OSZ - 01 **Site** Oszentivan **Period** Neolithic Grave 1 **# 2884**

Juvenile ○ yes ◉ no **Sex** ○ M ○ M? ○ M?? ○ M/F ○ F?? ◉ F? ○ F ○ ?

Age class ○ neonate ○ child ◉ young adult ○ old adult ○ infant ○ adolescent ○ mature adult ○ unknown **Age** 18-24

Skeletal Pathology
- ☐ Trauma
- ☐ Metabolic
- ☐ Inflammatory/ Immune/ Infectious
- ☐ Mechanical/OA/DBC/DJD/MSM/Enth
- ☒ Anomaly/anatomical variation
- ☐ Non-specific stress indicators

Oral pathology
- ☐ Caries
- ☐ LEH/ NSSI
- ☒ Calculus
- ☐ Abscess
- ☒ Gum resorption
- ☐ AMTL
- ☐ Periodontal disease
- ☒ Anomaly/anat.variation

Stature cm