

Forensic anthropology

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Forensic anthropology is an active field of research within the forensic sciences. This becomes apparent in the fact that in recent years, numerous articles on subjects of forensic anthropology have been published in the worldwide leading journals of legal medicine [1–14].

This issue includes 12 articles dealing with forensic anthropology. They mainly have their origin in lectures presented at the first meetings of the Forensic Anthropology Society of Europe (FASE). FASE was created in Milano at the 19th Congress of the International Academy of Legal Medicine (IALM). Its aims are:

- to encourage the study of, improve the practice of, establish and enhance standards for and advance the science of forensic anthropology and related disciplines; promote knowledge and research in the field,
- to harmonise techniques and diagnostic procedures in forensic anthropology across Europe,
- to encourage and promote adherence to high standards of ethics, conduct and professional practice in forensic anthropology,
- to promote training and certification in forensic anthropology and eventually create Boards of certificates and inform the existence of trained forensic anthropologists in order to guarantee high quality performance in the medicolegal study of human remains,

- the formation of working groups in different areas of forensic anthropology and accreditation of protocols and laboratories [15].

More than 100 scientists have already been trained at FASE workshops. These days, the FASE represents more than 25% of the IALM members. FASE brings together anthropologists, forensic pathologists, odontologists, geneticists and other experts in the fields of forensic sciences. This is an important difference to the situation in the USA where forensic anthropology is only practised by anthropologists. Another difference is that forensic anthropologists in Europe do not only examine bones. Further central fields of work are the forensic age diagnostics of living individuals as well as the identification of living individuals on documentary photos or films. Examples of cases in which expertise in forensic anthropology are required are:

- scenes of crime involving badly charred bodies [16],
- mass disasters [17],
- age and sex analysis of unidentified remains [18, 19],
- facial and hand skin reconstruction [20–22],
- forensic age diagnostics of living individuals [23–25],
- height estimation of subjects represented in photograms [26] and
- radiographic identification with post-mortem multislice computed tomography [27].

The number of scientists working in the field of forensic anthropology and the degree of international cooperation between the various groups are increasing. There are international attempts at standardisation and quality assessment of the techniques and methodologies. It can therefore be hoped that in the future, forensic anthropology will play an even more important role in the elucidation of acts of crime.

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References

- Duric M, Rakocevic Z, Donic D (2005) The reliability of sex determination of skeletons from forensic context in the Balkans. *Forensic Sci Int* 147:159–164
- Patil KR, Mody RN (2005) Determination of sex by discriminant function analysis and stature by regression analysis: a lateral cephalometric study. *Forensic Sci Int* 147:175–180
- Paewinsky E, Pfeiffer H, Brinkmann B (2005) Quantification of secondary dentine formation from orthopantomograms—a contribution to forensic age estimation methods in adults. *Int J Legal Med* 119:27–30
- Schulz R, Mühler M, Mutze S, Schmidt S, Reisinger W, Schmeling A (2005) Studies on the time frame for ossification of the medial epiphysis of the clavicle revealed by CT scans. *Int J Legal Med* 119:142–145
- Prieto JL, Barberia E, Ortega R, Magana C (2005) Evaluation of chronological age based on third molar development in the Spanish population. *Int J Legal Med* 119:349–354
- Schaefer MC, Black SM (2005) Comparison of ages of epiphyseal union in North American and Bosnian skeletal material. *J Forensic Sci* 50:777–784
- Maat GJ, Maes A, Aarents MJ, Nagelkerke NJ (2006) Histological age prediction from the femur in a contemporary Dutch sample. The decrease of nonremodeled bone in the anterior cortex. *J Forensic Sci* 51:230–237
- Ubelaker DH, Buchholz BA, Stewart JE (2006) Analysis of artificial radiocarbon in different skeletal and dental tissue types to evaluate date of death. *J Forensic Sci* 51:484–488
- Tuller H, Duric M (2006) Keeping the pieces together: comparison of mass grave excavation methodology. *Forensic Sci Int* 156:192–200
- Schmeling A, Schulz R, Danner B, Rösing FW (2006) The impact of economic progress and modernization in medicine on the ossification of hand and wrist. *Int J Legal Med* 120:121–126
- Cameriere R, Ferrante L, Mirtella D, Cingolani M (2006) Carpals and epiphyses of radius and ulna as age indicators. *Int J Legal Med* 120:143–146
- Cattaneo C (2007) Forensic anthropology: developments of a classical discipline in the new millennium. *Forensic Sci Int* 165:185–193
- Martrille L, Ubelaker DH, Cattaneo C, Seguret F, Tremblay M, Baccino E (2007) Comparison of four skeletal methods for the estimation of age at death on white and black adults. *J Forensic Sci* 52:302–307
- Schmidt S, Mühler M, Schmeling A, Reisinger W, Schulz R (2007) Magnetic resonance imaging of the clavicular ossification. *Int J Legal Med* 121:321–324
- Baccino E (2004) Forensic Anthropology Society of Europe. A section of the International Academy of Legal Medicine. *Int J Legal Med* 118:N1
- Cunha E, Pinheiro J, Pinto-Ribeiro I, Viera DN (2007) Exchanged identities in a complex multiple homicide case. Identification and cause of death. *Int J Legal Med* (in press)
- Prieto JL, Tortosa C, Bedate A, Segura L, Abenza JM, Mariscal de Gante MC, Conejero J, Magana C, Perea B (2007) The 11 March 2004 Madrid terrorist attack: the importance of the mortuary organisation for identification of victims. A critical review. *Int J Legal Med* (in press)
- Braga J, Treil J (2007) Estimation of pediatric skeletal age using geometric morphometrics and three-dimensional cranial size changes. *Int J Legal Med* (in press)
- Ramsthaler F, Kreutz K, Verhoff MA (2007) Accuracy of metric sex analysis of remains using Fordisc® based on a recent skull collection. *Int J Legal Med* (in press)
- Quatrehomme G, Balaguer T, Staccini P, Alunni-Perret V (2007) Assessment of the accuracy of three-dimensional manual craniofacial reconstruction: a series of 25 controlled cases. *Int J Legal Med* (in press)
- De Angelis D, Cattaneo C, Grandi M (2007) Dental superimposition: a pilot study for standardising the method. *Int J Legal Med* (in press)
- Lefèvre P, Van Sint Jan S, Beauthier JP, Rooze M (2007) Hand skin reconstruction from skeletal landmarks. *Int J Legal Med* (in press)
- Cameriere R, De Angelis D, Ferrante L, Scarpino F, Cingolani M (2007) Age estimation in children by measurement of open apices in teeth: a European formula. *Int J Legal Med* (in press)
- Olze A, van Niekerk P, Ishikawa T, Zhu BL, Schulz R, Maeda H, Schmeling A (2007) Comparative study on the effect of ethnicity on wisdom tooth eruption. *Int J Legal Med* (in press)
- Meijerman L, Maat GJR, Schulz R, Schmeling A (2007) Variables affecting the probability of complete fusion of the medial clavicular epiphysis. *Int J Legal Med* (in press)
- De Angelis D, Sala R, Cantatore A, Poppa P, Dufour M, Grandi M, Cattaneo C (2007) New method for height estimation of subjects represented in photographs taken from video surveillance systems. *Int J Legal Med* (in press)
- Dedouit F, Telmon N, Costagliola R, Otal P, Lacroix Florence L, Joffre F, Rougé D (2007) New identification possibilities with post-mortem multislice computed tomography. *Int J Legal Med* (in press)