



ISDM

**15th International Symposium
on Dental Morphology**
Newcastle UK 2011

10:15 – 10:45 **Tea/Coffee Break/Poster Removal**

- 10:45 – 11:00 Kierdorf U, Kierdorf H, Witzel C, Hufschmid J, Beveridge I and Coulson G: Macroscopic and microstructural features of fluorotic enamel in free-ranging Eastern Grey Kangaroos (*Macropus giganteus*).
- 11:00 – 11:15 Moustakas JE, Kallonen A, Harjunmaa E, Salazar-Ciudad I, Hämäläinen K and Jernvall J: Tooth cusps feel the force.
- 11:15 – 11:30 Lacruz RS, Smith CE, Hubbard MJ, Bromage TG, Snead ML, Kurtz I and Paine ML: Genetic regulation of enamel mineralization.
- 11:30 – 11:45 Hughes TE and Townsend GC: Twin studies of dental crown morphology: genetic and environmental determinants of the Cusp of Carabelli.
- 11:45 – 12:00 Final discussion and determination of the host for the 16th ISDM

Poster Presentations:

1. Heikkinen T, Grön M, Harila V and Alvesalo L: Intercuspal distances of the M1 in malocclusions.
2. Lynch CD, O'Sullivan DR, Dockery P and Sloan AJ: Regional variations in Hunter-Schreger Band density in human premolar and molar teeth.
3. Ashar A, Hughes T, Townsend G, James H and Kaidonis J: Differentiating the indifferent within the human dentition: what should we look for?
4. Conroe K: Dental Morphology at the Ancient Site of Alalakh.
5. Cucina A: To which extent does the geo-chemical composition affect enamel susceptibility to carious lesions? A chemical analysis using LA-ICP-MS.
6. Stocki L, Dzięciółowska-Baran E, Gawlikowska-Sroka A and Szczurowski J: The topography and morphology of the mandibular canal of skulls from two historical populations.
7. Withdrawn
8. Kanazawa E, Nakayama M, Matsuno M, Takahashi M, Yoshida S and Peiris R: Dental Arch Morphology in Five Chinese Minorities in Yunnan Province.
9. Kato A, Kouchi M, Mochimaru M and Ohno N: A geometric morphometric analysis of the crown form of the maxillary central incisor.
10. Peiris HRD, Wickramanayaka E, Arambawatta AKS, Hewapathirana T, Chandrasekara M and Nanayakkara CD: Nonmetric Tooth Crown Traits in a Sri Lankan Aboriginal Vedda Population.
11. Mahoney P: Human deciduous canine and incisor crown formation time: preliminary results.
12. Puranen M and Vaskilampi T: Cranial base, upper face and tooth size interactions in two Finnish male groups.
13. Schroer K and Wood B: *Paranthropus* and *Homo* mandibular premolar morphology: a comparative model in sympatric primates.
14. Vodanović M, Galić I, Njemirovskij V, Šlaus M and Brkić H: Expression of Carabelli's trait on deciduous molars in Croatian late antique and medieval populations.
15. Wood B and Schroer K: *Paranthropus boisei* in the role of model organism: revisiting *Paranthropus* monophyly through the inhibitory cascade model of postcanine development.

Expression of Carabelli's trait on deciduous molars in Croatian late antique and medieval populations.

Vodanović M¹, Galić I², Njemirovskij V¹, Šlaus M³ and Brkić H¹.

¹Department of Dental Anthropology, School of Dental Medicine, University of Zagreb, Croatia; ²Splitsko-Dalmatinska County - Public Health Centre, Split, Croatia.

³Croatian Academy of Science and Arts, Zagreb, Croatia.

Carabelli's trait (CT) is one of the most intensively studied dental morphological traits. Majority of published studies are performed on permanent teeth. Studies of expression of CT on deciduous teeth are very rare especially if performed on archaeological samples. Respecting that deciduous molars are morphologically considered a model for the permanent molars (isomorphy), examining deciduous molars it is possible to get data on crown patterns of permanent molars in an indirect way. This is very important in bioarchaeological investigations where the possibilities of crown patterns study are limited by excessive tooth wear. The purpose of this study was to examine the incidence and degree of expression of a CT on deciduous molars in samples from late antique - LA (3rd – 6th century) and medieval - M (7th – 11th century). Research has been carried out on 68 subadult Caucasian skulls (12 LA and 56 M) with 130 intact deciduous maxillary second molars excavated at 6 archaeological sites in Croatia. Expression of CT was classified according to the 8 level Dahlberg's scale. CT was identified on 41.67% of examined teeth in LA sample and on 50.00% in M sample. Frequency of tubercle and cusp forms only was in LA sample 25.00% and 8.92% in M sample. There were no statistically significant differences in frequencies. According to the frequencies of CT both samples belong to the Garn's intermediate frequency group. Deciduous molars of archaeological samples are often intact and should be used as substitute if permanent molars are unavailable for examination.