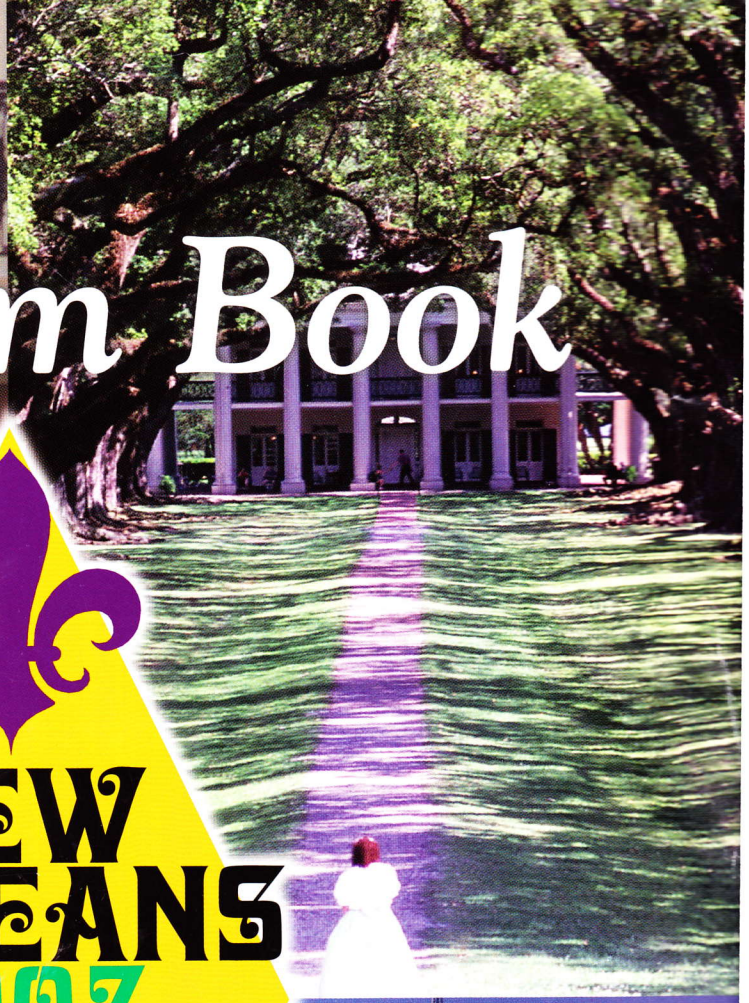
2007 IADR Program Book



NEW ORLEANS 2007

March 21-24

IADR 85th *General Session*

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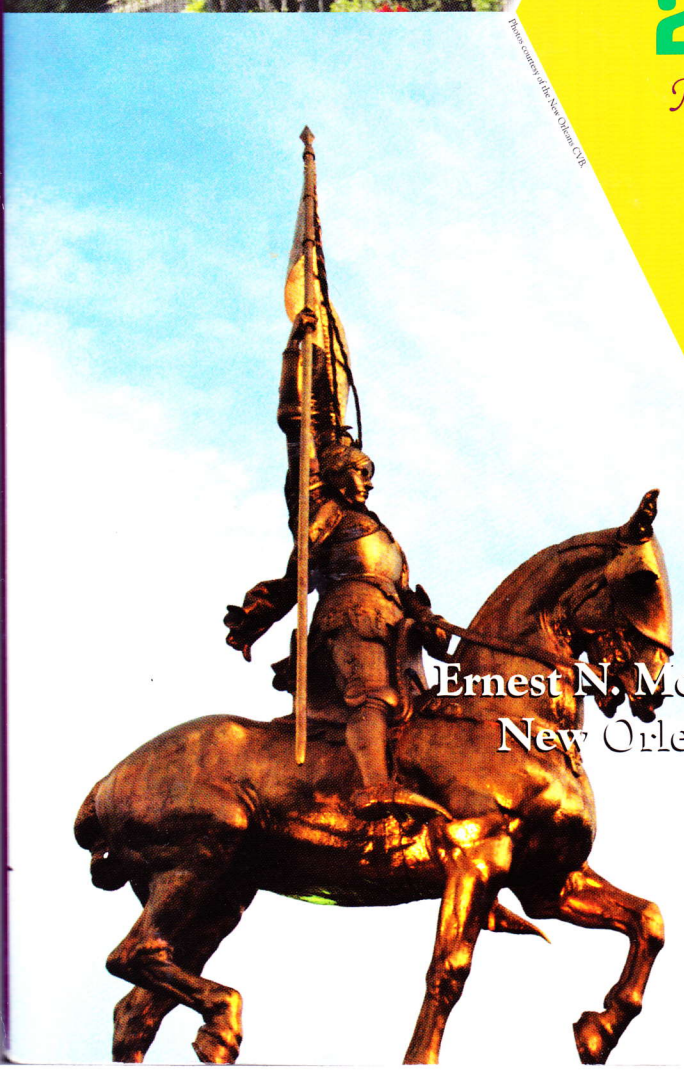

Ernest N. Morial Convention Center
New Orleans, Louisiana, USA

2809 Oral-health-related Quality of Life in Patients with Hypersensitive Teeth. C. HIRSCH*, K. BEKES, M.T. JOHN, and H.-G. SCHALLER *(Martin-Luther-University Halle, Germany)*

2810 Low-resource Screening of Pre-cancerous Lesions and Its Reversal by Triphala. A. KOCHHAR* *(Manipal College of Dental Sciences, India)*

2811 Withdrawn.

2812 Cleaning Efficacy of Six Interdental Brushes. D.J. HOFER*, T. IMFELD, T. ATTIN, and P.R. SCHMIDLIN *(University of Zürich, Switzerland)*

2813 Withdrawn.

2814 Next-generation Non-abrasive Tooth-cleaning Gel. D. MORI*, S. YAMAGUCHI, and M. TAKAYAMA *(GC Corporation, Tokyo, Japan)*

2815 Gingivitis Suppression Effect of the Dentifrices Containing *Curcuma xanthorrhiza*. S.-J. HWANG, B.-H. JIN*, D.-I. PAIK, and H.-D. KIM *(Seoul National University, South Korea)*

2816 Cystein Protease Reduces Tongue Coating and Volatile Sulfur Compounds. K. NOHNO*, T. YAMAGA, N. KANEKO, and H. MIYAZAKI *(Graduate School of Medical and Dental Sciences, Niigata University, Japan)*

2817 Withdrawn.

2818 Development of an *in vitro* Whitening Model. J. GORDON* and E. PATERSON *(GlaxoSmithKline Consumer Healthcare, Weybridge, United Kingdom)*

2819 Breakdown of Hydrogen Peroxide Gel in the Mouth. E.E. NEWBY*, L.A. STOCKERT, M.L. BOSMA, M. NORTH, and J. LIEBMAN *(GlaxoSmithKline, Weybridge, United Kingdom)*

2820 Convenient Culture Kit to Estimate Individual *S. mutans* and *S. sobrinus* Levels. K. MIZUNO*, T. IKEMI, K. MONZAWA, H. GOTOUDA, S. KOBAYASHI, Y. NISHIYAMA, I. KANTAKE, N. HANADA, and K. FUKUSHIMA *(Nihon University, Chiba, Japan)*

2821 Oral Tolerability of Hydrogen Peroxide Whitening Gel Formulations. A. BORDAS*, M.P. BOSMA, C.J. KLEBER, K. MILLEMAN, J. MILLEMAN, N. SCHOBER, and G. SHANGA *(GlaxoSmithKline, Weybridge, United Kingdom)*

2822 Caries Experience in Children with Disabilities Compared with Healthy Children. V. FUGOSIC*, D. BAKARCIC, V. MIKIC, N. IVANCIC JOKIC, and R. GRZIC *(University of Rijeka, Medical Faculty, School of Dentistry, Croatia)*

2823 COX-2 -765G->C Polymorphisms and Oral Cancer Risk in Southern Taiwan. Y.-C. LIN*, H.-I. HUANG, C.-C. TSAI, and C.-H. CHEN *(Kaohsiung Medical University, Taiwan)*

2824 Enamel Safety Study of an Experimental Tooth-whitening Formulation. A. HUNT*, F. LIPPERT, and C. GONZALEZ-CABEZAS *(GlaxoSmithKline Consumer Healthcare, Weybridge, United Kingdom)*

2825 Safety and Efficacy of a 10% Hydrogen Peroxide Whitening Gel. L.A. STOCKERT*, K. BAROUTH, M.L. BOSMA, and A. SELMANI *(GlaxoSmithKline, Parsipanny, NJ, USA)*

2826 Cultured Gingival Fibroblasts as a Model of Oral Mucosa Inflammation. R. RETI*, M. WHEATER, and G. SOSNE *(University of Detroit Mercy, MI, USA)*

2827 *Enterococcus faecalis*: Resistant Endodontic Pathogen Not Found in Oral Cultures. J.G. THOMAS*, L.A. NAKAISHI, J.S. ELLIS, and D. KEPNER *(West Virginia University, Morgantown, USA)*

Seq#: 291 Saturday, 24 March 2007, 10:45 AM - 12:00 NOON
Poster, Exhibit Hall I2-J

Mineralized Tissue - *Biophysics*

2828 Withdrawn.

2829 Wavelength Dependency of Dental Hard-tissue Ablation Shown by FEL. T. SAKAE*, Y. SATO, and I. SATO *(Nihon University, Matsudo, Chiba, Japan)*

2830 Bovine Teeth as Substitutes in Erosion-Abrasion Experiments. T. ATTIN*, D. GRIES, K. BECKER, and A. WIEGAND *(University of Zürich, Switzerland)*

2831 Effects of Different Fluoridation Regimes on Microhardness of Bleached Enamel. A. WIEGAND*, M. SCHREIER, and T. ATTIN *(University of Zürich, Switzerland)*

2832 Withdrawn.

2833 Hardness of Red and White Enamel in Shrews. K. KOYASU*, F. BUSSY, J.-M. SOLLETTI, A. KARIMI, T. KAWAI, H. HANAMURA, and P. VOGEL *(Aichi-Gakuin University, Nagoya, Japan)*

2834 Toughness Comparison of Human Dentin and Bovine Bone. J. YAN*, B. TASKONAK, and J.J. MECHOLSKY *(Indiana University School of Dentistry, Indianapolis, USA)*

2835 On the Crack Growth Resistance of Human Dentin. A. NAZARI*, D. BAJAJ, and D. AROLA *(University of Maryland at Baltimore, USA)*

2836 Compositional-Mechanical Relationships in Murine Incisal Enamel. M. BALDASSARRI*, H.C. MARGOLIS, L. SCALISE, and E. BENIASH *(Forsyth Institute, Boston, MA, USA)*

2837 AFM Characterization of Surface Changes with Dietary-acid-induced Demineralization. A. MIELCZAREK*, M. KLUKOWSKA, W. MRÓZ, D.J. WHITE, and S. BURDYńSKA *(Medical University of Warsaw, Poland)*

2838 Fatigue of Dentin is Dependent on the Tubule Orientation. J. REID*, M. COX, R. REPROGEL, and D. AROLA *(University of Maryland Baltimore County, USA)*

2839 Effect of Gamma Radiation on Nanomechanical Properties of Extracted Teeth. D.S. BRAUER*, K. SAEKI, J.F. HILTON, G.W. MARSHALL, and S.J. MARSHALL *(University of California - San Francisco, USA)*

2840 *Quasi*-static and Dynamic Indentation of Bone. A.M. RUMMEL*, F.M. BECK, J.L. HAY, P. MOREL, and S.S. HUJA *(Ohio State University, Columbus, USA)*

2841 Microhardness of Enamel Surface: Influence of Bleaching and Simulated Brushing. J.F.D.E.G. AZEVEDO* and R.F.L. MONDELLI *(University of São Paulo, Bauru, Brazil)*

Seq#: 292 Saturday, 24 March 2007, 10:45 AM - 12:00 NOON
Poster, Exhibit Hall I2-J

Mineralized Tissue - *Ultrastructure*

2842 A New Method for the Quantification of Enamel Prism Organization. W.R. MOSTAFIZ*, F.E. GRINE, V.P. THOMPSON, and T.G. BROMAGE *(Brown University, Providence, RI, USA)*

2843 Sex Determination Using Tooth Dimensions in a Croatian Medieval Population. M. VODANOVIC*, H. BRKIC, M. ŠLAUS, and □. DEMO *(University of Zagreb School of Dental Medicine, Croatia)*

2844 A Comparative Study of 3rd Molar Enamel from Different Subjects. M.F. ORELLANA*, J. CAREY, G. HEO, and P. MAJOR *(University of Alberta, Edmonton, Canada)*

Vodanović M, Brkić H, Šlaus M, Demo Ž. Sex determination using teeth dimensions in a Croatian medieval population. 85th General session & exhibition of the International Association for Dental Research, March 21-24, 2007, New Orleans, Lousiana, USA. J Dent Res. 2007;86(Spec ISS A): abstract number 2843.

2843 Sex determination using teeth dimensions in a Croatian medieval population

M. VODANOVIC, University of Zagreb School of Dental Medicine, Croatia, H. BRKIC, University of Zagreb, School of Dental Medicine, Croatia, M. ŠLAUS, Croatian Academy of Sciences and Arts, Zagreb, Croatia, and Ž. DEMO, Museum of Archaeology, Zagreb, Croatia

OBJECTIVES: Evaluation of teeth dimensions like a tool for sex determination in archaeological investigations and answering the following questions: 1) which tooth type is most suitable for determination of sex, 2) which tooth dimension provides the best sex discrimination and 3) how antemortem and postmortem damages influence on teeth and their dimensions.

METHODS: Research was carried out on 49 skulls (25 males and 24 females) from the medieval cemetery in eastern Croatia. Sex of the skulls was previously established on the basis of cranial and postcranial morphology by an experienced forensic odontologist and anthropologist. Three dimensions of permanent teeth were measured: mesiodistal diameter of the tooth crown, mesiodistal diameter of the tooth cervix and buccolingual crown diameter. The multifactorial statistics were performed using the discriminant procedure in order to find which tooth and which dimension provides the best difference between sexes.

RESULTS: Measurements were performed on 946 permanent teeth. Central incisors and third molars were the teeth with the highest prevalence of antemortem or postmortem tooth loss. Canines had the lowest prevalence of tooth loss and they are considered as most suitable for determination of sex. Mesiodistal diameter of the crown of the upper canine (males 7.6+/-0.6 mm; females 7.4+/-0.5 mm) and mesiodistal diameter of the cervix of the same tooth (males 6.1+/-0.5 mm; females 5.5+/-0.3 mm) were detected as variables providing the best sex discrimination. A discriminant function derived from these two variables provided 94.1% reliability in sex determination.

CONCLUSIONS: Teeth are suitable for sex determination in investigations of archaeological populations. Dental wear and postmortem damages can reduce the number of available teeth. Each metric method for sex determination including odontometrics requires population specific standards.

The research was supported by the Ministry of Science, Education and Sports of the Republic of Croatia – grant No. 0065004.

Seq #292 - Ultrastructure
10:45 AM-12:00 PM, Saturday, March 24, 2007 Ernest N. Morial Convention Center Exhibit Hall I2-J

Poster

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Back to the IADR/AADR/CADR 85th General Session and Exhibition (March 21-24, 2007)