

# anatomy

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Special Issue includes  
abstracts for the IVth  
International Symposium  
of Clinical and Applied  
Anatomy (ISCAA) &  
XIVth National Congress  
of Anatomy  
28th June - 1st July,  
2012,  
Ankara, Turkey

The poster features three circular logos at the top: Ankara University, the Turkish Society of Anatomy and Clinical Anatomy (TSAKA), and the Turkish Society of Anatomical Sciences (TSA). The central text reads: **4 ISCAA International Symposium of Clinical and Applied Anatomy** and **14. National Anatomy Congress**. The location is **Ankara-TURKEY** and the dates are **June 28 - July 01, 2012**. The poster is flanked by two anatomical illustrations of a human figure, one showing the front view and the other the back view. At the bottom center is a large, intricate geometric pattern. Below the pattern, it says **In Honor of Prof. Dr. Alaittin Elhan**.

### Oral Presentations

June 29, 2012 – Friday **Yellow Hall**

Moderators: Draga Stiblar-Martincic, Christine Schroeder, Alp Bayramoğlu

- |             |                               |   |
|-------------|-------------------------------|---|
| 10.30-11.30 | I-14                          | Predictive value of tissue markers - morphometrical evaluation<br><u>Stiblar-Martincic D</u>  |
|             | I-15                          | From bedside to bench and back again: the role of the transcription factor Fra-2 in human breast cancer<br><u>Schroeder C</u>   |
|             | O-20                          | Effect of adding cholesterol on fertilizing ability of frozen/thawed C57BL/6 mouse sperm in vitro<br><u>Saki G, Movassaghi S</u>  |
|             | O-21                          | Effect of ecstasy administration during pregnancy period on mice fetuses and fertility potentials<br><u>Khalili MA, Miresmaeili SM, Mostafavi-Pour Manshadi SMY, Malakoutian T</u>                |
|             | O-22                          | Melatonin protects folliculogenesis through up-regulation of estrogen receptors in mouse under treatment with nicotine<br><u>Mohammad Ghasemi F, Khajeh Jahromi S, Homafar MA, Seyed Saadat N</u> |
| 11.30-12.00 | Poster Presentations (P1-P50) |   |

### Oral Presentations

June 29, 2012 – Friday **Yellow Hall**

Moderators: Vaclav Baca, Belgin Can, Deniz Demiryürek

- |             |   |   |
|-------------|---|---|
| 12.00-13.00 | I-16  | Corneal graft survival in association with donor's cause of death<br><u>Bacova T, Sajdikova M, Strakosova K, Bába V, Vranova J, Urbanova Y, Kuchynka P, Netukova M</u>            |
|             | O-23  | Effect of pentoxifylline on brain cortex following transient global ischemia/reperfusion in Wistar rat<br><u>Movassaghi Sh, Sharifi ZN, Rafizadeh Malakshah S</u>                 |
|             | O-24  | Auditory ossicles development in fetal life<br><u>Dumic-Cule I, Erjavec I, Hladnik A, Rora M, Vinter I, Grgurevic L</u>   |
|             | O-25  | Assessment of morphological changes in neonate vitrified testis grafts after host treatment with melatonin<br><u>Hemadi M, Shokri S, Sobhani A</u>                                |
|             | O-26  | Macrosom babies from non-diabetic mothers, during 2011 Maternal Hospital "Niko Glozheni"<br><u>Poshi K, Hoxha A, Nurce A, Rustami E, Tonuzi O, XHaferi A, Arapi I, Qamirami S</u> |
| 13.00-14.00 | Group Photo (Stairs of Morphology Building) and Lunch |   |
| 14.00-14.30 | Primal Pictures - 3D Human Anatomy (Red Hall)         |   |

### Oral Presentations

June 29, 2012 – Friday **Yellow Hall**

Moderators: Dragan Krivakuca, Hakan Öztürk, İhsaniye İkiz Coşkun

- |             |      |   |
|-------------|------|---|
| 14.30-15.40 | I-17 | Serotonin/dopamin relationship<br><u>Krivokuća D, Eric M</u>  |
|             | O-27 | Biomaterials in regenerative medicine: uses and perspectives<br><u>Markovic D, Todorovic V, Colic K, Kovacevic-Filipovic M, Radovanovic A, Francuski J, Lužajić T</u> |

- O-28 Adipose-derived stem cells could sense the nano-scale cues as myogenic-differentiating factors  
Bayati V, Altomare L, Tanzi MC, Fare S
- O-29 The protective effect of omega-3 against the toxicity of ifosfamide in male rat testis  
Asad H, Aziz F
- O-30 Variations of tibial tuberosity in relation with total knee arthroplasty  
Bozkurt M, Akkaya M, Işık Ç, Apaydın N, Açar Hİ
- O-31 An accessory bundle from lateral fasciculus of brachial plexus merges into median nerve; case report  
Kasırğa UB, Gülbar S, Karaoğlan MY, Sargın MF

15.40-16.15 Coffee Break/Poster Presentations (P51-P101)

**Oral Presentations**

June 29, 2012 – Friday **Yellow Hall**

Moderators: Erdoğan Şendemir, Oya Evirgen, Tuncay Peker

- 16.15-17.30 O-32 Morphometric analysis of retroperitoneal adipocytes in rats exposed to high-fat diet during pre- and post-natal period  
Ay H, Yücel E, Ulupınar E
- O-33 The potential protective role of curcumin against the toxic effects of nicotine on the histological profile of the lung of adult male mice  
Dorria Zaghoul AM, Kamel ES, Abd el-Azi HO, Mahmoud MA
- O-34 Can fetal ossicles be used as prosthesis in adults: a morphometric study  
Nadeem G
- O-35 Inter-observer and intra-observer variability for measurement of low grade spondylolisthesis using lumbar spine radiographs  
Boey III, Tow B, Yew A
- O-36 Macrocystic tumors of the pancreas: the clinical impact of MRI in their diagnosis and treatment  
Zuckermann M, Donzellini M, Paternostro F, Beccani D, Zecchi Orlandini S, Capaccioli L
- O-37 Effect of short-term exposure to dichlorvos on rat brain: Molecular and stereological approach  
Yonguç GN, Dodurga Y, Kurtuluş A, Boz B, Acar K

17.30-18.00 Poster Presentations (P51-P101)

June 29, 2012 – Friday **Blue Hall**

8:30-14:00 Presentations of 14th National Anatomy Congress (in Turkish)

14:00-15:15 Satellite Symposiums, General Surgery Session (in Turkish)

15:15-15:45 Coffee Break/Poster Presentation (P51-P101)

**Oral Presentations**

June 29, 2012 – Friday **Blue Hall**

Moderators: Mürvet Hayran, Roger Soames, Bülent Cigalı

- 16.15-17.30 O-38 A review of sciatic nerve bifurcation with respect to regional anaesthesia  
Al-Khalaf E, AL-Talalwah W, Soames RW
- O-39 Arterial supply of the sciatic nerve roots  
AL-Talalwah W, Soames RW

born during January–December 2011. Among 2011 deliveries 4509 newborns 344 were macrosomic (7.3%). Involved the newborn until >4500 kg. Women had no pathology during the pregnancy. Among 2011 deliveries 4509, 344 (7.3%) were macrosomic. 51 of newborns were with birth weight 3800–4000 kg, (14.8%). With birth weights of 4000–4500 kg results 237 newborns (68.8%) and >4500 kg was only 56 (16.3%). Delivered males were 233 (67.7) and female 111 (32%). In depending of gestational age we had newborn that delivered among 37–38 week only 8 (2.3%) week 38–39 delivery 34 (9.8%), week 39–40, delivery 219 (63.6%). On the 40–41 week deliveries 36 (10%) newborns and 47 (13.6) among 41–42 week. 7.3% of newborn was macrosomic. 63.6% of the deliveries were among 39–40th gestational week. Most of the newborn were males 67.7%. If the mothers were diagnosed with a macrosomic fetus by sonography, more care should be taken during the delivery to decrease the risk of fetal injury, such as asphyxia, brachial plexus palsy.

**Keywords:** Macrosomia, prevalence, gestational age

## O-27

### Biomaterials in regenerative medicine: uses and perspectives

Marković D\*, Todorović V\*\*, Colić K\*\*\*, Kovačević-Filipović M\*\*\*\*, Radovanović A\*, Francuski J\*\*\*\*\*, Lužajić T\*\*\*\*\*

\*Department of Histology and Embriology, Faculty of Veterinary Medicine (FVM), University of Belgrade (UB); \*\*Faculty of Dentistry in Pancevo, University Business Academy, Novi Sad; \*\*\*Faculty of Mechanical Engineering, UB, Inovation Centre; FVMUB, \*\*\*\*Department of Pathophysiology; PhD Student, FVMUB

Regenerative adult cell therapy with or without supporting biocompatible material, has been currently successfully treated in horses and dogs, especially in joint, bone and ligament injuries. Mesenchymal stem cells (MSC) including dental pulp stem cells (DPSC) are showing increasing promise in applications as tissue engineering and cell therapy. There is some evidence showing bone regeneration from MSC loaded on each hydroxyapatite tricalcium phosphate (HAP/TCP), Gelatin/TCP sponge etc., as a scaffolds. The aim of this study was to evaluate the biocompatibility of new fabricated, TCP, and compare results with other standard bioceramic materials (BCM) – dental ceramic (DC), HAP, TCP. In addition, hDPSC were evaluated for MSC biological characterizations and differentiation into mesenchymal lineages. DC, TCP, TCP and HAP were implanted in rat subcutaneous tissue according to the ISO 10993-6; 10993-10 for screening tests by histological examinations (using the routine histological techniques and immunohistochemical method [for labelling T and B lymphocytes and macrophages]). DPSC from 5 adult humans were isolated, ex-vivo expanded and characterized in vitro by FACS, immunocytochemistry and histochemistry. The irritation index (the level of tissue injuring) among the different BCM were in all cases in the range of biocompatibility. Evaluating different responses

according to BCM, the most intense tissue reaction was noticed at HAP, grading as severe; and mild to moderate for DC, TCP and TCP. MSC characteristics of DPSC were demonstrated by the expression of STRO-1, CD73, CD105, CD44. The potential of DPSCs to differentiate into osteoblasts, adipocytes and chondrocytes, was further confirmed by positive expression of markers of respective cell types, and positive histochemical stainings. This study demonstrated suitability of TCP for application in regenerative medicine. Also, data for DPSC demonstrated that ex-vivo expanded DPSCs possess multi-lineage differentiation, i.e. potential for differentiation in bone, cartilage and adipose tissues.

**Keywords:** Regenerative medicine, bioceramics, biocompatibility, DPSC

## O-28

### Adipose-Derived Stem Cells Could Sense the Nano-scale Cues as Myogenic-differentiating Factors

Bayati V, Altomare L, Tanzi MC, Fare S

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It has been revealed that some microenvironmental cues, such as surface topography and substrate stiffness, may promote stem cells adhesion, morphology, alignment, proliferation and differentiation. The aim of this work was to investigate ASCs adhesion, alignment and differentiation into myogenic lineage on nanofibrous polymeric scaffolds with anisotropic topography. To fabricate nanostructured scaffolds, Polycaprolactone (PCL) and the polycarbonateurethane ChronoFlex AL80A (CFAL) were used. Nanofibrous mats were fabricated using a home-made electrospinning apparatus into four morphologies: smooth film (s) obtained by solvent casting, randomized matrix (r), parallel fibers on randomized matrix (pr) and parallel fibers on smooth film (ps). Human ASCs were cultured on the scaffolds and differentiated into myogenic lineage using growth factors. After 7 days, cells on scaffolds were fixed and examined using SEM and immunofluorescence. A good degree of fiber alignment was observed for scaffold with aligned nanofibers. Immunofluorescence showed that the cells expressed myosin (fast skeletal) and tropomyosin in all morphologies of PCL and CFAL scaffolds. SEM indicated that myotube formation was only occurred on CFAL scaffolds especially pr and r morphologies and that only few myotubes were observed on PCL scaffolds. It was concluded that nano-scale fibers, their orientation and the stiffness and elasticity of a substrate seemed to play a vital role in promoting the myogenic differentiation of ASCs.

**Keywords:** Adipose-derived stem cells, Nanofibrous scaffolds, topography, myogenic differentiation