

VIII National Conference with International Participation  
“Morphological Days”, June 10 – 12, Sofia, Bulgaria

**PROGRAM**

<b>Friday, June 10<sup>th</sup></b>		<i>Conference venue: Sofia Hall, INTERPRED – World Trade Centre Sofia, 36 Dragan Tsankov blvd.</i>
<b>13:00-14:00 Registration</b>		
<b>14:00-14:30 Opening ceremony</b> <i>Welcome and Opening Words: Prof. Svetlozara Petkova Prof. Nina Atanassova Prof. Nikolai Lazarov</i>		
<b>I Plenary Session 14:30-16:00</b>		<i>Chairs: N. Lazarov, N. Atanassova</i>
<b>14:30</b>	<b>Microbeam radiotherapy: how does morphology help treat cancer</b> <i>V. Djonov, Bern, Switzerland</i>	
<b>15:00</b>	<b>Consequences of negative energy balance on follicular development and oocyte quality in primiparous sows</b> <i>K. Teerds, Wageningen, Netherlands</i>	
<b>15:30</b>	<b>Circulating cf-DNA and its Integrity index as potential markers for epithelial ovarian cancer diagnosis</b> <i>F. Sherif, M. El Desouky, M. Gebril, O. Azmy, Cairo, Egypt</i>	
<b>16:00-16:30 Coffee Break</b>		
<b>II Plenary Session 16:30-18:00</b>		<i>Chairs: : V. Ovtsharoff, D. Kadiysky</i>
<b>16:30</b>	<b>Regulation of tyrosine hydroxylase (TH) and dopamine <math>\beta</math>-hydroxylase (DBH) gene expression and intracellular signaling pathways involved</b> <i>V. Georgiev, New York, USA</i>	
<b>17:00</b>	<b>Involvement of viral infections in the development of non-communicable diseases</b> <i>M. Murovska, Riga, Latvia</i>	
<b>17:30</b>	<b>Some anthropological and pathological aspects in the Bronze Age of Romania</b> <i>A. Comsa, Bucharest, Romania</i>	
<b>19:00-24:00 Welcome Dinner</b> <i>Restaurant Principi Di Piemonte, INTERPRED – World Trade Centre Sofia</i>		

**Saturday, June 11<sup>th</sup>**

**Conference venue:  
National Anthropological Museum  
73 Tsarigradsko Shouse blvd.**

**III Plenary Session 8:30-9:30**

*Chairs: L. JeleV, I. Stefanov*

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| 8:30 | <b>The human carotid body and its role in ventilatory acclimatization to hypoxia</b><br>N. Lazarov, D. Atanasova, Sofia, Bulgaria               |
| 8:50 | <b>Hypertension-induced structural and neurochemical plasticity of the rat carotid body</b><br>D. Atanasova, N. Lazarov, Stara Zagora, Bulgaria |
| 9:10 | <b>Human brain beyond frontiers of knowledge</b><br>S. Sivkov, Plovdiv, Bulgaria  |

**I Oral Presentations 9:30-10:30**

*Chairs: A. Tonchev, S. Delchev*

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| 9:30  | <b>Localization of CGRP-immunoreactive structures in the pulmonary neuroepithelial bodies of spontaneously hypertensive rats</b><br>N. Stamenov, D. Atanasova, L. JeleV, A. Dandov, N. Lazarov, Sofia, Bulgaria    |
| 9:40  | <b>Immunohistochemical analysis of <math>\alpha 7</math>-nAChR from the hippocampus structures of rats, exposed to simulated microgravity</b><br>V. Yotov, R. Ardasheva, V. Turiyski, P. Rashev, Plovdiv, Bulgaria |
| 9:50  | <b>Age related changes of the pineal gland</b><br>Y. Tivcheva, M. Angelov, N. Krastev, D. Krastev, A. Apostolov, Sofia, Bulgaria   |
| 10:00 | <b>Regulation of apoptosis in odontoblasts in ageing dental pulp by NFkB and JAK1-STAT3 signaling pathway</b><br>N. Manchorova, M. Guenova, Plovdiv, Bulgaria  |
| 10:10 | <b>Effect of metformin and quinine on liver and renal cells</b><br>N. Mladenov, J. Doumanov, K. Mladenova, Sofia, Bulgaria   |
| 10:20 | <b>Glucagon- and insulin immunopositive endocrine cells in porcine extrahepatic bile ducts and gallbladder</b><br>I. Stefanov, S. Stefanov, M. Gulubova, Stara Zagora, Bulgaria                                    |

**10:30-11:00 Conference Photo and Coffee Break**

**IV Plenary Session 11:00-11:30**

*Chair: R. Alexandrova*

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| 11:00 | <b>In silico virology study of SARS-CoV-2</b><br>Č. Podlipnik, M. Jukić, Ljubljana, Slovenia |
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**II Oral Presentations 11:30-12:30**

*Chairs: S. Petkova, Y. Koeva*

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| 11:30 | <b>The world and COVID-19: what did we (not) learn during the pandemic?</b><br>R. Alexandrova, M. Jukić, Č. Podlipnik, Sofia, Bulgaria  |
| 11:40 | <b>What promotes development of fatigue in rheumatoid arthritis patients?</b><br>A. Kadiša, Z. Nora-Krukke, L. Sokolovska, S. Grāvelsiņa, K. Vecvagare, S. Svirkis, A. Lejnieks, M. Murovska, Riga, Latvia                                      |
| 11:50 | <b>The muscle phase of trichinellosis in experimentally infected mice is associated with up-regulation of dystrophin</b><br>R. Milcheva, I. Mečiarová, K. Todorova, V. Dilcheva, A. Georgieva, P. Janega, S. Petkova, P. Babál, Sofia, Bulgaria |

## VIII National Conference with International Participation “Morphological Days”

12:00	<b>Establishment and primary morphological and functional characterization of cell cultures from mouse bone explants</b> B. Andonova-Lilova, <b>D. Dinev</b> , A. Abudalleh, T. Zhivkova, L. Dyakova, K. Sezanova, N. Saha, O. Azmy, R. Alexandrova, <i>Sofia, Bulgaria</i>
12:10	<b>Impact of melatonin deficit on physiological function in young adult, mature and old rats: role of oxidative stress</b> <b>P. Ivanova</b> , P. Hrishev, K. Georgieva, V. Uzunova, I. Georgieva, R. Tzoneva, J. Tchekalarova, <i>Sofia, Bulgaria</i>
12:20	<b>Spiral theory of the human body: the positive and negative space in human embryonic development</b> I. Ivanova, S. Hamza, <b>N. Pirovski</b> , <i>Stara Zagora, Bulgaria</i>
<b>12:30-14:00 Lunch Break</b>	
<b>V Plenary Session 14:00-14:40</b> <span style="float: right;"><i>Chairs: N. Dimitrov, S. Sivkov</i></span>	
14:00	<b>Transcriptional profiles along the rostro-caudal axis of the adult monkey neurogenic niche</b> <b>A. Tonchev</b> , H. Wang, M. Ivanov, C. Thaller, S. Pavlov, T. Yamashima, A. Stoykova, J. Yan, G. Eichele, <i>Varna, Bulgaria</i>
14:20	<b>Mechanisms of Ghrelin neuroprotection in an in vitro model of brain damage</b> <b>I. Stoyanova</b> , A. Klymenko, D. Lutz, <i>Varna, Bulgaria</i>
<b>III Oral Presentations 14:40-15:30</b> <span style="float: right;"><i>Chairs: I. Stoyanova-Van der Laan, D. Atanasova</i></span>	
14:40	<b>3D modelling, 3D printing and quality assurance of the external morphology of high-fidelity bone models</b> <b>P. Valchanov</b> , S. Pavlov, <i>Varna, Bulgaria</i>
14:50	<b>Virtual reality in anatomy instruction: a preliminary study</b> G. Aytac, <b>S. Tunali</b> , <i>Turkey, USA</i>
15:00	<b>Application of 3D anatomical atlas <a href="http://www.LearningAnatomy.com">www.LearningAnatomy.com</a> in online and presence training of the students</b> <b>Y. Stoyanov</b> , S. Hamza, N. Malcheva, N. Genov, V. Pilicheva, N. Pirovski, A. Georgieva, I. Ivanova, N. Dimitrov, I. Stefanov, I. Valkova, <i>Stara Zagora, Bulgaria</i>
15:10	<b>Difficulties when performing an infraclavicular block- anesthesia due to abnormalities in axillary fossa</b> <b>P-P. Petrov</b> , S. Novakov, E. Bozhikova, <i>Plovdiv, Bulgaria</i>
15:20	<b>The cavernous sinus, cranial nerve anatomy and the orbit presented in immersive photorealistic layered dissections</b> <b>T. Spiriev</b> , A. Mitev, V. Stoykov, N. Dimitrov, I. Maslarski, V. Nakov, <i>Sofia, Bulgaria</i>
<b>15:30-16:00 Coffee Break</b>	
<b>16:00-16:15 In Memoriam: Prof. Yordan Yordanov</b> N. Atanassova, <i>Sofia, Bulgaria</i>	
<b>16:15-17:15 Meeting of the Bulgarian Anatomical Society</b>	
<b>17:15-18:30 Poster Session I</b> <span style="float: right;"><i>Chairs: A. Vodenicharov, S. Trifonov, S. Novakov, I. Maslarski</i></span>	

**Sunday, June 12<sup>th</sup>**

**Conference venue:  
National Anthropological Museum  
73 Tsarigradsko Shouse blvd.**

**VI Plenary Session 9:00-10:00**

*Chairs: N. Davcheva, E. Petrova*

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| 9:00 | <b>Cobalt-mediated regulatory pathways of iron homeostasis</b><br>Y. Gluhcheva, E. Petrova, E. Pavlova, I. Vladov, A. Tinkov, O. Ajsuvakova, A. Skalny, Sofia, Bulgaria |
| 9:20 | <b>The odd behavior of the nuclei in maturing mammalian oocytes and zygotes</b><br>S. Delimitreva, Sofia, Bulgaria  |
| 9:40 | <b>Unusual cause of death in a patient with COVID-19</b><br>N. Davcheva, A. Ivceva, K. Tosevska-Trajkovska, J. Dzengis, Shtip, North Macedonia                          |

**IV Oral Presentations 10:00-11:10**

*Chairs: E. Pavlova, Y. Gluhcheva*

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| 10:00 | <b>Extragenital Lichen sclerosus and atrophicus</b><br>M. Gantcheva, Sofia, Bulgaria   |
| 10:10 | <b>Study of analgesic effects of KB-R7943 in a streptozotocin-induced rat's diabetic neuropathy model</b><br>P. Gateva, N. Ivanova, M. Strokova-Stoilova, M. Hristov, Z. Sabit, I. Sukhov, V. Dashieva, O. Chistiakova, A. Spasova, N. Shestakova, Sofia, Bulgaria |
| 10:20 | <b>Comparison of three different devices for osteotomy – a histological study in humans</b><br>B. Blagova, D. Krastev, L. Malinova, Sofia, Bulgaria  |
| 10:30 | <b>Role of antiganglioside antibodies in patients with ischemic stroke</b><br>V. Kolyovska, D. Drenska, D. Maslarov, Sofia, Bulgaria   |
| 10:40 | <b>Preliminary observations on apoptotic fragmentation of cultured mouse oocytes</b><br>M. Markova, A. Kolarov, I. Chakarova, V. Hadzhinesheva, R. Zhivkova, S. Delimitreva, M. Mourdjeva, V. Nikolova, Sofia, Bulgaria  |
| 10:50 | <b>Oocyte cytoskeletal changes in mouse collagenase-induced osteoarthritis model</b><br>R. Zhivkova, A. Kolarov, V. Hadzhinesheva, I. Chakarova, V. Nikolova, S. Delimitreva, M. Markova, Sofia, Bulgaria  |
| 11:00 | <b>Cryopreservation of gametes, embryos and ovarian tissue as a method for fertility preservation in oncological patients</b><br>E. Hristova, N. Petrova, P. Todorov, Sofia, Bulgaria  |

**11:10-11:30 Coffee Break**

**11:30-12:30 Poster Session II**

*Chairs: M. Dimitrova, I. Vladov,  
R. Stoev, Z. Mitova*

**12:30-13:30 Lunch Break**

**VII Plenary Session 13:30-14:10**

*Chair: N. Atanassova, K. Dimitrova*

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| 13:30 | <b>Contradictory interpretation of similar morphological results</b><br>M. Davidoff, Hamburg, Germany    |
| 13:50 | <b>Recent trends of physical development in different world populations</b><br>E. Godina, Moscow, Russia |

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<b>V Oral Presentations 14:10-15:50</b>		<i>Chairs: I. Yankova, A. Katsarov</i>
14:10	<b>Assessment of body composition in Bulgarian adults</b> I. Yankova, Y. Zhecheva, A. Dimitrova, <i>Sofia, Bulgaria</i>	
14:20	<b>Influence of different sports of the body composition in growing female athletes</b> A. Dimitrova, I. Ivanova-Pandourska, <i>Sofia, Bulgaria</i>	
14:30	<b>Correlation between tooth eruption of permanent teeth and nutritional status in 8 years old Bulgarian children (Preliminary data)</b> B. Kirilov, <i>Sofia, Bulgaria</i>	
14:40	<b>The effect of changes in nutritional plan and micronutrient deficits compensation on the TSH levels in Hypothyroid and Hashimoto patients. Preliminary results.</b> Y. Danailova, Z. Mitova, <i>Sofia, Bulgaria</i>	
14:50	<b>Comparative anthropological characterization of Northern Balkan populations after anthropological materials of 20<sup>th</sup> century</b> R. Stoev, L. Macuga, <i>Sofia, Bulgaria</i>	
15:00	<b>Modern opportunities of three dimensional reconstruction of segments of the human skeleton</b> S. Fursova, T. Kolev, T. Kalchev, A. Katsarov, <i>Sofia, Bulgaria</i>	
15:10	<b>Possible case of hydrocephalus from a late Antiquity burial in Gradishte area near town of Vratsa</b> K. Vasilev, <i>Sofia, Bulgaria</i>	
15:20	<b>Results from the anthropological investigation of the material from tomb from antique Apolonia Pontica</b> V. Russeva, L. Manoilova, <i>Sofia, Bulgaria</i>	
15:30	<b>Anthropological data about the buried in a Christian necropolis (from the Ottoman period), situated near the town of Dimovo, Vidin region</b> N. Atanassova, L. Ovnarska, <i>Sofia, Bulgaria</i>	
15:40	<b>Defects on cranial bones from tomb №1, Sofia, Janko Sakazov str.</b> V. Russeva, V. Panchev, Y. Meshekov, I. Borissova, <i>Sofia, Bulgaria</i>	
<b>15:50 Closing</b>		



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САВИМЕД ЕООД

## POSTER PRESENTATIONS

### Poster Session I (Posters №1-41)

Saturday, June 11<sup>th</sup>

*Conference venue:*

*National Anthropological Museum  
73 Tsarigradsko Shouse blvd.*

**17:15-18:30**

*Chairs: A. Vodenicharov, S. Trifonov,  
S. Novakov, I. Maslarski*

1. **A. Abudalleh**, D. Dinev, L. Dyakova, T. Zhivkova, M. Dimcheva, D. Staneva, I. Grabchev, R. Alexandrova - **Cytotoxic activity of chitosan and its derivative.**
2. **A. Comşa** - **Dental Problems in Some Skeleton Series from Romania.**
3. **A. Georgieva**, K. Todorova, R. Toshkova, I. Iliev, V. Dilcheva, I. Vladov, S. Petkova, P. Dolashka - **Cytomorphological and histopathological assessment of the antitumor potential of mollusk hemocyanins in Graffi myeloid tumor.**
4. **A. Georgieva**, M. Ignatova, N. Manolova, I. Rashkov, R. Toshkova - **Antiproliferative and proapoptotic activities of novel electrospun materials containing 8-hydroxyquinoline-5-sulfonic acid in HeLa cancer cells.**
5. **A. Ivanov**, M. Popivanova, D. Dikov, V. Belovezhdov - **Place and meaning of mast cells in Microscopic collagenous colitis – review of two cases.**
6. A. Vodenicharov, I. Stefanov, N. Tsandev, **G. Kostadinov** - **Mast Cells Distribution in the Domestic Swine Urinary Bladder's Wall.**
7. D. Barbutska, **A. Petrova**, Y. Koeva, K. Georgieva, Y. Tchekalarova, G. Nanov - **Testicular steroidogenesis after pinealectomy - the role of BDNF signaling system.**
8. **D. Krushovlieva**, S. Georgiev, P. Ivanova, Z. Petkova, Tz. Stoyanova, J. Tchekalarova - **Age-dependent effect of melatonin deficit on behavioral responses: the impact of Hsp70 and Hsp90 in the frontal cortex.**
9. **D. Stoyanov**, D. Filcheva, M. Ivanov, A. Stoykova, A. Tonchev - **Selective neuronal deficits in the striatum of Zbtb20 knock-out mice.**
10. **F. Gerginska**, S. Delchev, V. Vasilev, K. Georgieva, N. Boyadjiev - **The selective androgen receptor modulator ostarin increases the extracellular matrix in the myocardium without altering it in the EDL muscle.**
11. **G. Nenkova**, G. Yaneva, Ts. Dimitrova, A. Simona, D. Ivanov - **Quality of intact and artificially collapsed human blastocysts after vitrification.**
12. **H. Hristov**, D. Dinev, A. Abudalleh, L. Dyakova, D.-C. Culita, G. Marinescu, R. Alexandrova - **Metal complexes with Schiff base decrease viability and 2D/3D growth of human cervical carcinoma cells.**
13. **I. Maslarski** - **Anatomical variant of the sacrum and its clinical correlation.**
14. **K. Stamatova-Yovcheva**, R. Dimitrov, D. Yovchev, P. Yonkova - **Anatomical corrosion study of the blood and bile vessels in the liver of the rabbit.**

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15. **L. Dyakova**, A. Abudalleh, T. Zhivkova, D. Dinev, G. Marinescu, D-C. Culita, R. Alexandrova - **Cytotoxic properties of Zn(II)/Au(I) and Zn(II)/Ag(I) complexes with Schiff bases in human carcinoma cells.**
16. **L. Gogiasvili**, Z. Tsagareli - **The pathology of mice brain cortex and the vagus nerve nuclei in the medulla oblongata (N. Ambiguus, N. Dorsalis) induced by influenza A virus (H3N1).**
17. **L. Jelev**, D. Pupaki, D. Ankova, A. Gradev, N. Vulova, P. Markova - **Expression of nNOS and eNOS in the aorta of spontaneously hypertensive rats after selective blockade of endothelin ETA or ETB receptor subtypes.**
18. **M. Angelov**, J. Tivcheva, L. Jelev, N. Krastev, D. Krastev - **Fenestrated posterior cerebral artery: A case report.**
19. **M. Angelova**, D. Marinova, V. Zhekova - **Association between morphometric indices of the foot and BMI.**
20. M. Cistjakovs, L. Sokolovska, A. Sultanova, **M. Murovska** - **Human herpesvirus-6 (HHV-6) involvement in thyroid autoimmunity - features of the study.**
21. **M. Ivanov**, A. Mladenov, L. Veleva, D. Stoyanov, S. Pavlov, A. Tonchev - **APLNR expression in the mouse subventricular zone.**
22. **M. Ivanov**, V. Nickel, D. Stoyanov, S. Pavlov, A. Tonchev - **Rostro-caudal differences in gene expression along the primate subventricular zone.**
23. **M. Jürison**, K. Pent, R. Karise, M. Mänd - **Effect of sulfoxaflor and azoxystrobin towards bumble bees.**
24. **M. Kanarev**, N. Petrova, A. Petrova, S. Sivkov - **Functional aspects of the human claustrum – literary review.**
25. **N. Dimitrov**, D. Atanasova, B. Panova, N. Genov, N. Malcheva, I. Ivanova, S. Hamza, Y. Staykova-Pirovska, D. Sivrev - **Skin reaction during acupuncture.**
26. **N. Genov**, N. Dimitrov, I. Stefanov, D. Atanasova, I. Ivanova, S. Hamza, I. Valkova, A. Georgieva, Y. Stoyanov, N. Pirovski, V. Pilicheva, N. Malcheva - **The next step in anatomy.**
27. **N. Tsandev**, I. Stefanov, A. Vodenicharov - **Preparation of three-dimensional polymer models of cat bones.**
28. N. Vilmosh, P. Atanasova, P. Hristchev, **N. Penkova** - **Morphological study on the toxic effects of *Satureja montana* after longitudinal treatment of experimental animals.**
29. **N. Vulova**, E. Bichkova, L. Jelev, L. Malinova - **The fibrous and muscular axillary arch. Report of two cases.**
30. **O. Alexandrov**, T. I. Tomori, M. Dimcheva, A. I. Said, H. Hristov, A. Abudalleh, D. Dinev, T. Zhivkova, L. Dyakova, I. Grabchev, D-C. Culita, G. Marinescu, R. Alexandrova - **First steps in evaluating cytotoxic / antitumor activity of new compounds.**
31. S. Hamza, **N. Pirovski**, T. Kitova, N. Genov - **Development of a new type of embalming solution for preparations of human tissue.**
32. **S. Naudi**, M. Jürison, D. Salkova, R. Karise - **The honey bee *Apis mellifera* pathogens *Nosema* spp: distribution and relationships with queen breeding and queen rearing success.**

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33. **S. Semenistaja**, M. Tarasovs, R. N. Goldiņš, V. Groma - **A modern education programme for patients with osteoarthritis.**
34. **S. Semenistaja**, M. Tarasovs, S. Skuja, V. Groma - **Anatomical compartments of the synovial membrane: role in arthritis.**
35. **T. Gvianishvili**, M. Mchedlishvili, L. Gogiashvili - **Immunohistochemical diversity of papillary thyroid carcinoma Solid variant: Case Report in 15-year-old boy.**
36. T. Sokrateva, G. Nenkova, A. Salim, A. Alexandrov, **B. Roussev** - **Association between body-mass index, smoking and alcohol consumption with semen quality in men.**
37. **V. Dilcheva**, I. Vladov, K. Todorova, A. Georgieva, I. Iliev, R. Toshkova, S. Petkova, P. Dolashka - **Hematological and histopathological evaluation of mice, immunized with Helix aspersa, Helix lucorum and Rapana venosa hemocyanins, subjected to infection with Trichinella spiralis and Trichinella pseudospiralis.**
38. **V. Iliev**, L. Malinova, L. JeleV - **A variation of the third common palmar digital artery.**
39. **V. Nanev**, I. Vladov, E. Dencheva, M. Gabrashanska - **Profile of manganese accumulation in the host-parasite (Rattus norvegicus- Fasciola hepatica) system after manganese treatment.**
40. **Y. Tivcheva**, M. Angelov, Ts. Kirilov, N. Krastev, D. Krastev, L. JeleV - **Bilateral polar renal arteries: a case report.**
41. **Z. Harizanova**, A. Baltadjiev, F. Popova, M. Peycheva, M. Yordanova, M. Kanarev, N. Kadreva - **Are odontometric dimensions population-specific?**

### Poster Session II (Posters №42-82)

Sunday, June 12<sup>th</sup>

*Conference venue:*  
**National Anthropological Museum**  
**73 Tsarigradsko Shouse Blvd.**

**11:30-12:30**

*Chairs:* M. Dimitrova, I. Vladov,  
R. Stoev, Z. Mitova

42. A. Alexandrov, Y. Handzhiyski, R. Mironova, **D. Iliev** - **Characterization of extracellular vesicles released by glioblastoma multiforme (GBM) cells (U87-MG).**
43. **A. Dimitrova**, I. Ivanova-Pandourska - **Age- and sex-specific differences in height, weight and BMI in 9-14-year-olds adolescent.**
44. **A. Gradev**, N. Vulova, L. JeleV, L. Malinova - **A variation of the digastric muscle anterior belly related to a false submandibular triangle.**
45. **A. Iliev**, G. Kotov, S. Stanchev, N. Stamenov, V. Kirkov, B. Landzhov - **Interstitial changes in the aging rat myocardium.**
46. **A. Kolarov**, I. Chakarova, V. Hadzhinesheva, S. Delimitreva, M. Markova, V. Nikolova, M. Mourdjeva, R. Zhivkova - **Oocyte Morphology in a Mouse Model of Collagenase-Induced Osteoarthritis.**
47. **B. Blagova**, D. Krastev, L. Malinova - **Thermal changes in human bone following osteotomy by three different devices – a histological analysis using different staining protocols.**
48. **B. Landzhov**, L. Gaidarski, A. Iliev, S. Stanchev, N. Stamenov, G. P. Georgiev - **Morphological changes in adult degenerative scoliosis.**



49. **E. Georgieva**, I. Velcheva, V. Yancheva, E. Petkova, D. Todorova-Bambaldokova, S. Stoyanova - **Acute toxicity of pesticide exposure and histopathological changes in Common carp (*Cyprinus carpio* Linnaeus, 1785).**
50. **E. Hristova**, Tz. Todorova, P. Todorov - **Methods of artificial oocyte activation.**
51. **E. Pavlova**, S. Zapryanova, I. Vladov, E. Petrova, Y. Gluhcheva, Y. Tabakov, R. Ivanov, E. Lakova, N. Atanassova - **Testicular expression of apoptosis-related proteins in condition of experimentally induced diabetes in rat.**
52. **E. Pavlova**, Y. Gluhcheva, E. Petrova, I. Vladov, I. Pashkunova-Martic, M. Schaiier, P. Dorkov, T. H. Helbich, B. Keppler, N. Atanassova, J. Ivanova - **Effects of deferiprone and salinomycin on cadmium-induced toxicity in mouse testis.**
53. **E. Petrova**, Y. Gluhcheva, E. Pavlova, I. Vladov, I. Pashkunova-Martic, J. Ivanova - **Effects of salinomycin and deferiprone on cadmium-induced morphological changes in the mouse brain.**
54. **F. Chelmis**, P. Patakaridis, D. Pechlivanova - **The role of stimulation of cerebral angiotensin AT2 receptors in the control of emotional behavior and pain in spontaneously hypertensive rats.**
55. **G. Tomov**, **K. Vassilev** - **Diffuse idiopathic skeletal hyperostosis – two cases from Medieval Bulgaria.**
56. **I. Bochev**, Ts. Oreshkova, I. Vangelov, M. Yunakova, T. Timeva - **Human granulosa cell line COV434 under hypoxic and inflammatory conditions.**
57. **I. Chakarova**, V. Hadzhinesheva, R. Zhivkova, M. Markova, V. Nikolova, A. Kolarov, N. Mladenov, G. Boneva, S. Bradyanova, A. Tchorbanov, S. Delimitreva - **Defective oogenesis in mice with pristane-induced model of systemic lupus.**
58. **I. Sainova**, I. Ilieva - **Understanding the role of mitochondria in the processes of differentiation of mesenchymal stem/progenitor cells and male germ cells.**
59. **I. Yankova**, Y. Zhecheva, A. Dimitrova - **Changes in the shape and proportionality of the chest in children aged 2-6 years.**
60. **K. Malinova**, E. Krachmarova, R. Hristova, G. Nacheva, A. Gospodinov - **Effect of SARS-CoV-2 ORF6 protein on DNA replication in eukaryotic cells.**
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