

LS-2. Structure and function of cells and organelles

8 September, 17:00 - 19:00 / 9 September, 16:30 - 18:30

LS-2-P-1393

Scanning electron microscopic studies on sertoli cell of dog (*Canis lupus familiaris*)

Presenting author: **Choudhary O. P.**

Authors: Choudhary O. P., Dhote B. S., Singh I., Bharti S. K., Sathapathy S., Mrigesh M., Singh G. K.

LS-2-P-1399

Immune-LCM analysis of M1/M2 macrophages in engineered dental pulp tissues

Presenting author: **Kaneko T.**

Authors: Kaneko T., Yamanaka Y., Ito T., Okiji T.

LS-2-P-1412

PIP2: A new key player in the transcription of ribosomal genes

Presenting author: **Yildirim S.**

Authors: Yildirim S., Castano E., Dzajak R., Philimonenko V. V., Sobol M., Venit T., Hozák P.

LS-2-P-1444

Membrane surface negative charge characteristic of leukemic cells

Presenting author: **Marikovsky Y.**

Authors: Marikovsky Y.

LS-2-P-1446

The ultrastructure and biochemical composition of the notochordal sheath in dogfish *Scyliorhinus canicula* L.

Presenting author: **Dujmović I.**

Authors: Dujmović I., Vukojević K., Saraga Babić M., Bočina I.

LS-2-P-1471

Localization and Distribution of Ghrelin in the Gastrointestinal Tract of the Golden Apple Snail, *Pomacea canaliculata*

Presenting author: **Ngernsoungnern P.**

Authors: Ngernsoungnern P., Ngernsoungnern A.

LS-2-P-1474

Observations on the ultrastructure of endocrine cells in axolotl testis

Presenting author: **Keyhani E.**

Authors: Keyhani E.

LS-2-P-1475

Artistic compositions by surfactant in axolotl lung alveoli

Presenting author: **Keyhani E.**

Authors: Keyhani E.

LS-2-P-1478

Micro-morphology of the liver of the juvenile Nile crocodile, *Crocodylus niloticus*

Presenting author: **Van Wilpe E.**

Authors: Van Wilpe E., Groenewald H. B.

LS-2-P-1481

Plants related to early evolutionary events (Bryophytes) contain Lacandonia granules previously discovered in flowering plants

Presenting author: **Alonso-Murillo C. D.**

Authors: Alonso-Murillo C. D., Jiménez-García L. F.

LS-2-P-1507

Presence and Distribution of Ghrelin Receptor in the Nervous System of *Pomacea canaliculata*

Presenting author: **Ngernsoungnern A.**

Authors: Ngernsoungnern A., Ngernsoungnern P.

LS-2-P-1544

Fluorescent sesquiterpene lactone trilobolide: focus on endoplasmic reticulum and mitochondria

Presenting author: **Rimpelová S.**

Authors: Rimpelová S., Jurášek M., Peterková L., Kmoníčková E., Drašar P., Ruml T.

LS-2-P-1657

Three-dimensional reconstruction of *Angomonas deanei* reveals association of the protozoa organelles and a symbiotic bacterium

Presenting author: **Catta-Preta C.**

Authors: Catta-Preta C., De Souza W., Motta C.

LS-2-P-1728

Influence of surface topography on osteoblast-like cell behavior to zirconia

Presenting author: **Yoshinari M.**

Authors: Yoshinari M.

LS-2-P-1930

Keratocyte interaction with stromal microfibril bundles in murine cornea

Presenting author: **Behzad A. R.**

Authors: Behzad A. R., Brown E. S., Burns A. R., Hanlon S. D.

LS-2-P-1932

The Expression of Chondroitin Sulfate in Human Amniotic Fluid Cells during Short Term Culture

Presenting author: **Aungsuchawan S.**

Authors: Aungsuchawan S., Keawdee J., Ongchai S., Kongtawelert P., Pothacharoen P.

LS-2-P-1938

Altered structural analysis of the brain in a *Drosophila* of Alzheimer's disease model: A FIB-SEM microscopy study

Presenting author: **Park S. J.**

Authors: Park S. J., Schertel A., Han S. S.

LS-2-P-1957

The secretory pathway in electron microscopy: Sec16 and ER exit sites

Presenting author: **Schmidt K.**

Authors: Schmidt K., Sealey M., Fedorenko I., Tögel S., Mallinger B., Wegscheider R., Ellinger A., Warren G.

LS-2-P-2030

Morphology of leaf starch granules of Arabidopsis thaliana wild type and mutants (sex1 & nex1)

Presenting author: **Maximova E.**

Authors: Annunziata M. G., Maximova E., Stitt M., Hartmann J., Lunn J. E.

LS-2-P-2064

Nuclear phosphatidylinositol-4,5-bisphosphate in a complex with histone demethylases.

Presenting author: **Uličná L.**

Authors: Uličná L., Kalasová I., Vacík T., Hozák P.

LS-2-P-2069

Actin filaments in the nucleus

Presenting author: **Kalendová A.**

Authors: Kalendová A., Yamazaki S., Kalasová I., Harata M., Hozák P.

LS-2-P-2121

Amyloid- β affected mitochondrial membrane as potential source for the autophagosome biogenesis

Presenting author: **Kim M. J.**

Authors: Kim M. J., Je A. R., Kim H. J., Kim H. G., Huh Y. H., Kweon H. S.

LS-2-P-2127

Golgi-endoplasmic intermediates in herpes virus infected cells

Presenting author: **Schraner E. M.**

Authors: Wild P., Schraner E. M., Käch A., Rohrer J., deOliveira A. P., Ackermann M., Tobler K.

LS-2-P-2137

Phosphatidylinositol 4,5-bisphosphate interacts with lysine-specific histone demethylase 1 in the nucleus.

Presenting author: **Kalasova I.**

Authors: Kalasova I., Ulicna L., Vacik T., Hozak P.

LS-2-P-2146

Three-Dimensional Ultrastructural Analysis of Neuronal Cells in Brain and Pharmacological Effects of Bromocriptine on Motor Behaviors of hLRRK2 (G2019S) Transgenic Mice

Presenting author: **Je A. R.**

Authors: Je A. R., Huh Y. H., Choi J., Lee Y., Lee J. K., Kim H. J., Kim M. J., Kim H. R., Kim H. G., Kweon H. S.

LS-2-P-2187

Structural analysis of mouse primary cilia and centrosome

Presenting author: **Kuwahara R.**

Authors: Kuwahara R., Shigeta M.

LS-2-P-2208

DEB-1 localization and its dynamics in the gonads of C.elegans during meiosis

Presenting author: **Fukalová J.**

Authors: Fukalová J., Rohožková J., Hozák P.

LS-2-P-2215

Gadolinium in the lactating mammary gland tissue. Ultrastructural and microanalytical study

Presenting author: **Tekaya L.**

Authors: Ayadi A., Maghraoui S., Mhamdi M., Badri N., Zaroui A., Ben Jemaa N., Tekaya L.

LS-2-P-2218

Highly toxic aberrant astrocytes have abundant and diverse secretory granules

Presenting author: **Jiménez-Riani M.**

Authors: Jiménez-Riani M., Díaz-Amarilla P., Trías E., Casanova G., Barbeito L., Olivera-Bravo S.

LS-2-P-2244

Structural study of centriole duplication process by using mice over-expressing centrosomal proteins

Presenting author: **Gogendeau D.**

Authors: Gogendeau d., Trepout s., Messaoudi c., Tassin a. m., Marco s., Basto r.

LS-2-P-2262

Telocytes: new players in the interstitium of human uterus

Presenting author: **Cretoiu D.**

Authors: Cretoiu D., Cretoiu S. M.,

LS-2-P-2285

Deletion of CD133 C-terminal cytoplasmic domain affects the architecture and dynamics of plasma membrane protrusions and the release of small extracellular membrane vesicles in human colon cancer cells.

Presenting author: **Lucchetti D.**

Authors: Lucchetti D., Palmieri V., Fanali C., Farina M., Svelto M., Cufino V., De Spirito M., Sgambato A.

LS-2-P-2318

ULTRASTRUCTURE OF THE SPERMATOGENESIS OF Spondylus calcifer (Carpenter, 1857) AND S. princeps (Gray, 1825) (MOLLUSCA: PELECIPODA: SPONDYLIDAE)

Presenting author: **Villalejo-Fuerte M.**

Authors: Villalejo-Fuerte M., Camacho M. A., Arellano M., Cuellar N., Lopez E. O., Esther U.

LS-2-P-2321

Staining in non-isotope metals to cell structure in serial sections from animal tissues

Presenting author: **Muranaka Y.**

Authors: Muranaka Y., Nishida T., Park S. M., Park P.

LS-2-P-2344

Structural changes of cherry tomatoes (Lycopersicon esculentum) packed in bags based on thermoplastic corn starch/talc nanocomposites

Presenting author: **Villar M. A.**

Authors: Lopez O. V., Castillo L. A., Garcia M. A., Barbosa S. E., Villar M. A.

LS-2-P-2357

Human neutrophil activation by Kojic Acid

Presenting author: **Frade P. R.**

Authors: Frade P. R., Costa J. P., Rodrigues A. D., Farias L. S., Do Nascimento J. M., Silva E. O.

LS-2-P-2358

Differentiation in vitro of bone marrow cells into macrophages induced by *Physalis angulata*

Presenting author: **Silva E. O.**

Authors: SILVA B. M., RODRIGUES A. D., FARIAS L. S., NASCIMENTO J. M., SILVA E. O.,

LS-2-P-2430

Architecture of the cuticle and epidermal cells: imaging and analyses of mineralized matrix assembly and disassembly in isopod crustaceans by TEM, FEG-SEM and EDXS

Presenting author: **Žnidaršič N.**

Authors: Žnidaršič N., Mrak P., Žagar K., Čeh M., Štrus J.

LS-2-P-2455

Detailed membrane association between mitochondria and surrounding endoplasmic reticulum in mammal cells revealed by three-dimensional reconstruction using focused ion beam scanning electron microscope

Presenting author: **Ohta K.**

Authors: Ohta K., Okayama S., Togo A., Nakamura K.

LS-2-P-2500

Does adipokinetic hormone play a role in neuronal communication within the insect brain?

Presenting author: **Weyda F.**

Authors: Weyda F., Kodrík D., Stašková T., Pfliegerová J.

LS-2-P-2507

Evaluation of morphological differences of breast cancer cells using various biological markers

Presenting author: **Simsone Z.**

Authors: Simsone Z., Freivalds T., Harju L., Gudrā D., Kudaba I., Liepniece-Karele I., Bērziņš J., Buiķis I.

LS-2-P-2529

Planar chromatin in interphase nuclei of human cells

Presenting author: **Chicano A.**

Authors: Chicano A., Daban J. R.

LS-2-P-2602

Is coenzyme-Q has a protective effect against atorvastatin induced myopathy? A histopathological & immunohistochemical study in albino rates

Presenting author: **Ahmed M. S.**

Authors: Ahmed M. S.

LS-2-P-2609

Chloroplast ultrastructure of *Fagus sylvatica* leaves – 3D visualization using dual-axis electron tomography and serial sectioning

Presenting author: **Radochová B.**

Authors: Radochová B., Michálek J., Janáček J., Čapek M., Lhotáková Z., Bílý T., Nebesářová J., Kubínová L., Albrechtová J.

LS-2-P-2626

Colocalization of Amelotin, Odontogenic-Ameloblast Associated and Secretory Calcium-Binding Phosphoprotein-Proline-Glutamine-rich 1 in the basal lamina at the interface of ameloblasts and maturing enamel

Presenting author: **Wazen R. M.**

Authors: Wazen R. M., Maia L., Dos Santos Neves J., Moffatt P., Nanci A.,

LS-2-P-2627

Light Microscopy , Electron Microscopy and Co-relative light electron Microscopy (CLEM) to study RTN4B (Reticulon 4B) / NogoB and Endoplasmic Reticulum.

Presenting author: **Kumar D.**

Authors: Kumar D., Rämö O., Vihinen H., Belevich I., Viita T., Joensuu M., Vartiainen M., Jokitalo E.

LS-2-P-2676

The 3D-structure of a mouse seminiferous epithelium observed with serial block face-SEM

Presenting author: **Hasebe Y.**

Authors: Hasebe Y., Haruta T., Searle S., Galloway S., Yarwood A., Nishioka H., Suzuki T.

LS-2-P-2907

Serial block face SEM for modeling cells of the pancreatic islet of Langerhans

Presenting author: **Leapman R. D.**

Authors: Shomorony A., Pfeifer C. R., Zhang G., Xu H., Cai T., Kim Y. C., Aronova M. A., Notkins A. L., Leapman R. D.

LS-2-P-2926

Nucleus Size and Shape Mystery

Presenting author: **Ganguly A.**

Authors: Ganguly A., Bhattacharyya D.

LS-2-P-3001

Ultrastructure of Cytoplasmic and Nuclear Inosine-5'-monophosphate Dehydrogenase 2 Inclusions

Presenting author: **Jůda P.**

Authors: Jůda P., Šmigová J., Raška I.

LS-2-P-3109

Two strategies for zinc sequestration in the moss *Pohlia drummondii* and *Physcomitrella patens*

Presenting author: **Lang I.**

Authors: Sassmann S., Weidinger M., Wernitznig S., Lang I.

LS-2-P-3120

Single Cell Compression Testing

Presenting author: **Lukes J.**

Authors: Lukes J., Grzanova P., Fuzik T., Sepitka J.

LS-2-P-3151

Piecemeal degranulation is the main secretory process of eosinophils during the experimental acute *Schistosoma mansoni* infection

Presenting author: **Dias F. F.**

Authors: Dias F. F., Amaral K. B., Malta K. K., Silva T. P., Chiarini-Garcia H., Melo R. C.

LS-2-P-3154

The extension and contraction mechanism of the proboscis of a ciliate, *Lacrymaria olor*

Presenting author: **Yanase R.**

Authors: Yanase R., Sonobe S.

LS-2-P-3161

A CLEM approach to investigate ultrastructural changes associated with the overexpression of lamin B1 in a mammalian cell line.

Presenting author: **Marotta R.**

Authors: Marotta R., Ruffilli R., Giacomini C., Gasparini L., Falqui A.

LS-2-P-3192

Actin dependent gliding motion of a diatom, *Bacillaria paradoxa*.

Presenting author: **Yamaoka N.**

Authors: YAMAOKA N., SUETOMO Y., SONOBE S.

LS-2-P-3219

Three-dimensional analysis of phagophore biogenesis at ultra-structural level

Presenting author: **Vihinen H.**

Authors: Vihinen H., Biazik J., Eskelinen E. L., Jokitalo E.

LS-2-P-3262

CHARACTERIZATION OF ELASTICITY OF WILD-TYPE AND MODIFIED CANCER CELLS USING ATOMIC FORCE MICROSCOPY-BASED METHODS

Presenting author: **Crawford K.**

Authors: Crawford K., Duan B., Sevim S., Iyison N. B., Torun H.

LS-2-P-3300

Molecular, structural and ultrastructural analyses of eosinophils in the jejunal mucosa of irritable bowel syndrome patients

Presenting author: **Sánchez-Chardi A.**

Authors: Salvo-Romero E., Fortea M., Sánchez-Chardi A., Lobo B., González-Castro A., Cardoso F., Azpiroz F., Santos J., Vicario M.

LS-2-P-3303

Fibrocyte - *Leishmania (L.) amazonensis* interaction: Toll "like" Receptor-2 participation

Presenting author: **Guerra C.**

Authors: Côte-Real S., Guerra C., Macedo-Silva R., de Lima C., Diniz V., Carvalho J.

LS-2-P-3306

The development of silica phytoliths in plants is morphologically pre-determined even under the absence of silica

Presenting author: **Martinka M.**

Authors: Martinka M., Soukup M., Ravaszová F., Švancárová M., Lux A.,

LS-2-P-3379

Protective effects of curcumin in liver damage induced by high-fat diet

Presenting author: **Ozdas Beyhan S.**

Authors: Ozdas Beyhan S., Tanrıku-Kucuk S., Yapıslar H., Seyithanoglu M., Oner-Iyidogan Y., Akin D., Koçak H., Dogru-Abbasoglu S., Kocak-Toker N.

LS-2-P-3405

Effects of Electrical Stimulation at Different Frequencies on the Cytoskeleton of Frog Nerve Terminals

Presenting author: **Mukhitov A. R.**

Authors: Mukhitov A. R., Nikolsky E. E.

LS-2-P-3409

In vitro clot structure of metabolic syndrome induced transient ischemic attack patients using scanning electron and atomic force microscopy

Presenting author: **Van Rooy M. J.**

Authors: van Rooy M. J., Buys A. V., Pretorius E., Duim W.

LS-2-P-3441

The Effect of Electrical Nerve Stimulation on the Dynamics of Posttranslational Modified Tubulin in Frog Motor Nerve Terminals

Presenting author: **Mukhitov A. R.**

Authors: Mukhitov A. R.

LS-2-P-3450

Effect of the Obesity Induced by High-Sugar Diet on Inflammatory Response During Experimental Infection by Mycobacterium bovis BCG

Presenting author: **Toledo D. A.**

*Authors: Assis A. A., Toledo D. A., Rodrigues G. S., Moreira D. A., Melo R. C., Gameiro A., Andreazzi A., *D'Avila H.*

LS-2-P-3509

Analysis of nucleolar structure by atomic force microscopy

Presenting author: **Segura-Valdez M. L.**

Authors: Segura-Valdez M. L., Zamora-Cura A., Chávez-Rosasles R., Jiménez-García L. F.

LS-2-P-3510

Lacandonia granules are present in Welwitschia mirabilis

Presenting author: **Agredano-Moreno L. T.**

Authors: Agredano-Moreno L. T., Segura-Valdez M. L., Muñiz Díaz de León M. E., Jiménez-Ramírez J., Jiménez-García L. F.

LS-2-P-3532

Mitochondria need superresolution microscopy: hypoxic cristae inflation is reflected distinctly by biplane FPALM with intermembrane space vs. matrix marker

Presenting author: **Špaček T.**

Authors: Špaček T., Alán L., Engstová H., Plecítá - Hlavatá L., Ježek P.

LS-2-P-5753

Ultrastructural changes in vascular beds during retinal vasculogenesis and angiogenesis of newborn mouse.

Presenting author: **Choi E. K.**

Authors: Choi E. K., Kim J. H., Yu Y. S., Yang M. G., Jung N. H., Han S. S.

LS-2-P-5795

In Situ Visualizing T-Tubule/SR Junction Reveals Novel Arrangement of Ryanodine Receptor-1 Using Electron Tomography

Presenting author: **Yang Y.**

Authors: Yang Y., Song X., Tang Y., Lei C., Cao M., Shen Y., Zhu J.

LS-2-P-5808

Ultrastructural alterations in the liver and kidney of Nile tilapia (*Oreochromis niloticus* Linn.) induced orally by ultra-low doses of endosulfan

Presenting author: **Polsan Y.**

Authors: Polsan Y., Sakaew W., Hipkaeo W.

LS-2-P-5874

Sticky business: How imaging tools reveal molecules involved in malaria pathogenesis

Presenting author: **Rug M.**

Authors: Rug M., Cyrklaff M., Lemgruber L., Frischknecht F., Prescott S., Hanssen E., Maier A. G., Cowman A. F.

LS-2-P-5906

THE EFFECTS OF CYCLOOXYGENASE 1 and 2 INHIBITION ON RENOMEDULLARY INTERSTITIAL CELLS IN RATS

Presenting author: **Demirci S.**

Authors: Demirci S., Seckin İ., Sönmez H., Ekmekci H., Erozcenci L. A., Popovici M.

LS-2-P-5923

Sperm ODF2: analysis using ODF2-EGFP transgenic mice

Presenting author: **Toshimori K.**

Authors: Toshimori K., Ito C., Yamatoya K.

LS-2-P-5958

Three-dimensional distribution of the mitochondrial DNA in the mammalian cell revealed by FIB/SEM tomography.

Presenting author: **Okayama S.**

Authors: Okayama S., Ohta K., Higashi R., Nakamura K.

LS-2-P-5963

The development of apoplasmic barriers in the cells of primary cortex affects phytoremediation characteristics of plants

Presenting author: **Martinka M.**

Authors: Martinka M., Demko V., Lux A.

LS-2-P-5996

Mesoscale organization of insect virus-polyhedra crystals revealed by rapid-freeze, freeze-fracture EM

Presenting author: **Morone N.**

Authors: Morone N., Mori H., Heuser J. E.

LS-2-P-6059

STRUCTURE OF NUCLEOLI IN OOCYTES FROM BIDDER'S ORGAN OF CUBAN ENDEMIC TOADS (ANURA: BUFONIDAE, PELTOPHRYNE)

Presenting author: **Jiménez-García L. F.**

Authors: Sanz-Ochotorena A., Segura-Valdez M. L., Rodríguez-Gómez Y., Lara-Martínez R., Jiménez-García L. F.

LS-2-P-6060

STAGES OF SPERMATOGENESIS REVEALED BY TEM IN ELEUTHERODACTYLUS FROGS (ANURA: ELEUTHERODACTYLIDAE).

Presenting author: **Jiménez-García L. F.**

Authors: Rodríguez-Gomez Y., Sanz-Ochotorena A., Segura-Valdez M. L., Lara-Martínez R., Jiménez-García L. F.