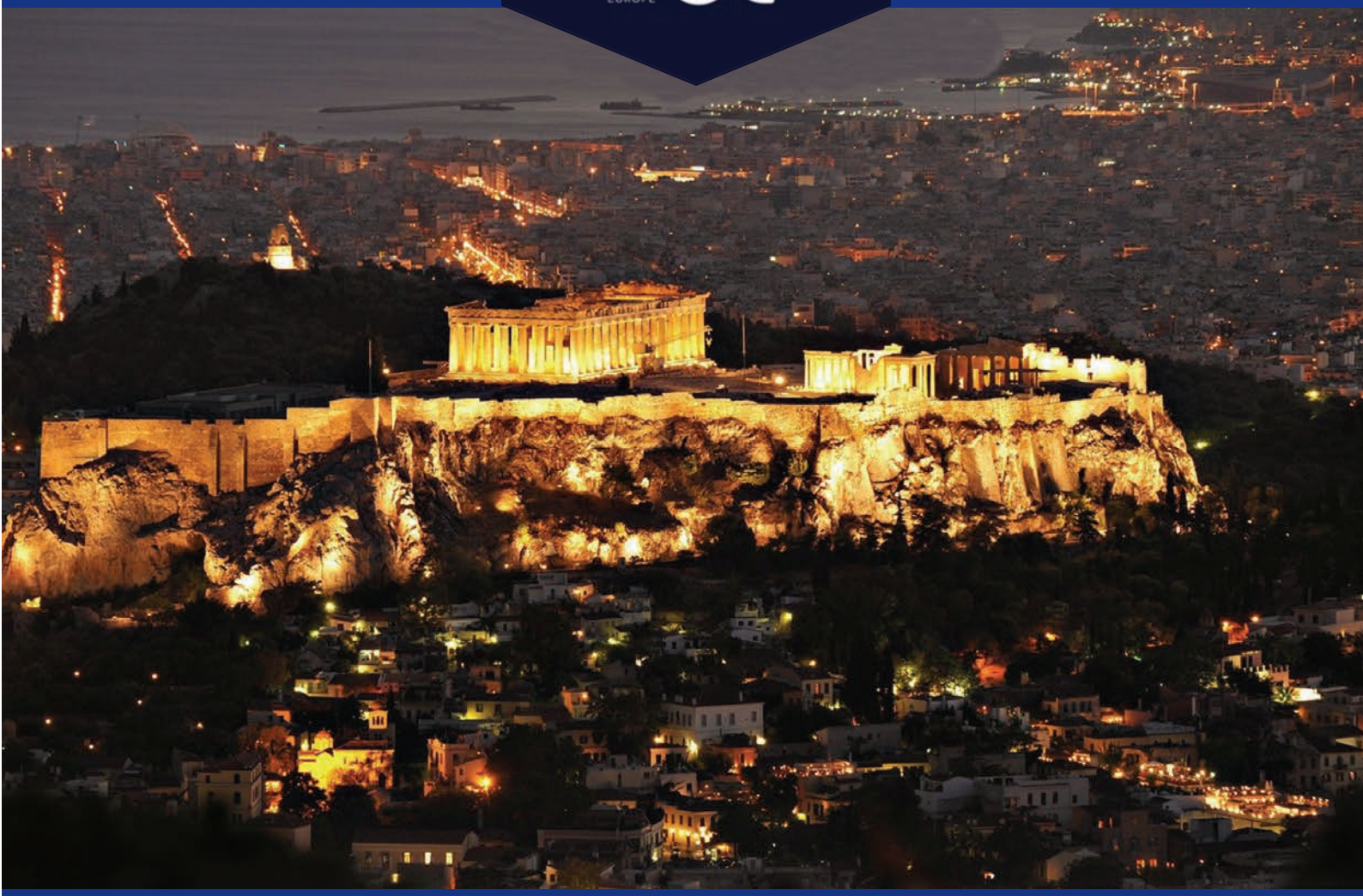
# 2nd MBE (Matrix Biology Europe) Conference

**Athens-Greece, 11-14 June 2016 / Royal Olympic Hotel**



# Conference Program
# List of Posters & Selected Talks

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- **Nikos K. Karamanos,** *University of Patras, GR*

## Members of the Scientific Committee

- **Ruud Bank,** *University of Groningen, NL*
- **John Couchman,** *University of Copenhagen, DK*
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- **Liliana Schaefer,** *Goethe University, DE*

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- **Despina Deligianni,** *University of Patras, GR*
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- **Dimitrios Kletsas,** *National Center for Scientific Research "Demokritos", GR*
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- **Achilleas D. Theocharis,** *University of Patras, GR*
- **Demitrios H. Vynios,** *University of Patras, GR*

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# Program at a glance

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<tr><td colspan="2">12.30-13.30 Posters I / Light Lunch</td><td colspan="2">12.50-14.00 Posters II / Light Lunch</td><td colspan="2">12.30-12.40 Break</td></tr>
<tr><td colspan="2">OLYMPIA HALL<br>13.30-14.00 PL: F-X. Maquart (FR)<br>14.00-14.30 PL: A. Passi (IT)<br>14.30-14.45 Break</td><td colspan="2">14.00-16.00 Free time / Visit-guided tour to the New Acropolis Museum (optional)</td><td colspan="2">OLYMPIA HALL<br>12.40-13.40 Plenary Workshop<br>D. Kletsas (GR)<br>V. Hascall (USA)<br>A. Day (UK)</td></tr>
<tr><td colspan="2">14.45-16.45 Parallel Workshops</td><td colspan="2" rowspan="2">OLYMPIA HALL<br>16.15-16.45 PL: L. Schaefer (DE)<br>16.45-18.15 Dick Heinegard European Young Investigator Award Presentations (6×15' STs)<br><br>18.15-19.00 MBE General Assembly</td><td colspan="2" rowspan="3">13.40-14.10<br>Awards/<br>Closing Ceremony<br><br>PL: Plenary Lecture; ST: Selected Talk</td></tr>
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<tr><td colspan="2">16.45-18.00 Posters I / Coffee<br>MBE Contact Persons Meeting</td></tr>
<tr><td colspan="2">OLYMPIA HALL<br>18.00-18.30 Rupert Timpl Award Lecture : A. Nystroem (DE)<br>18.30-19.00 PL: I. Sagi (IL)</td><td colspan="2">19.00-20.30 Posters II / Coffee<br>21.00-23.00 Conference Dinner</td></tr>
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# Conference Program

## SATURDAY, JUNE 11th, 2016

**16.00–20.00** **Registration**

**OLYMPIA HALL**

Chair Persons F. RAMIREZ (USA) & N. KARAMANOS (Greece)

**18.00–18.30** **Opening Ceremony**
— *Rector of the University of Patras, Prof. V. Kyriazopoulou*
— *Chairman of the Organizing Committee, Prof. N. Karamanos*
— *President of the ISMB, Prof. F. Ramirez*
— *President of the HSBMB, Dr. D. Kletsas*

**18.30–19.30** **Opening Lecture (L1): Renato V. IOZZO** *(USA)*
Novel proteoglycan functions in regulating autophagy and angiogenesis

**19.30–20.30** **POSTER SESSION I (P1-P61, P133, P134)**

**20.30–22.00** **Welcome Reception** (Roof Garden)

## SUNDAY, JUNE 12th, 2016

**OLYMPIA HALL**

Chair Persons: R. SANDERSON (USA) & B. BRODSKY (USA)

**09.00–09.30** **Plenary Lecture (L2): John R. COUCHMAN** *(Denmark)*
*Syndecan control of ion channels: a conserved mechanism for regulation of cell adhesion and migration*

**09.30–10.00** **Plenary Lecture (L3): Karl E. KADLER** *(UK)*
*Circadian clock regulation of the major control systems for collagen secretion and turnover*

**10.00–10.30** **Coffee Break**

**10.30–12.30** **PARALLEL WORKSHOPS 1 & 2**

**OLYMPIA HALL**

**10.30–12.30** **WORKSHOP 1:**
**Proteoglycans in health and disease**

Chair Persons: P. ROUSSELLE (France) & S. SKANDALIS (Greece)

***Invited Lectures (L4–L6)***

**10.30–10.50** **Paraskevi HELDIN** *(Sweden)*
*Functional role of Hyaluronan–CD44 interactions*

**10.50–11.10** **Ida Gjervold LUNDE** *(Norway)*
*Syndecans: new sweethearts in cardiac remodeling and failure?*

**11.10–11.30** **Mauro PAVAO** *(Brazil)*
*Heparin: new clinical uses for an old anticoagulant*

### *Selected Talks (ST1–ST5)*

**11.30–11.42** **Patricia ROUSSELLE** *(France)*
*Perlecan expression influences the keratin 15–positive cell population fate in the epidermis of aging skin*

**11.42–11.54** **Sissel B. RONNING** *(Norway)*
*Syndecan–4 is important for normal skeletal muscle fibre development*

**11.54–12.06** **Sophie DOGNE** *(Belgium)*
*Hyal–1 deficiency protects the endothelium in a mouse diabetic model*

**12.06–12.18** **Elvira DIAMANTOPOULOU** *(UK)*
*The role of versican in semicircular canal development in the zebrafish inner ear and in cancer progression*

**12.18–12.30** **Stephane BREZILLON** *(France)*
*Lumican inhibits SNAIL–induced melanoma cell migration specifically by blocking MMP–14 activity*

## ATTICA HALL

**10.30–12.30** **WORKSHOP 2:**
**Collagen modifications: role in matrix quality/quantity and disease**

Chair Persons: T. PIHLAJANIEMI (Finland) & P. BONALDO (Italy)

### *Invited Lectures (L7–L9)*

**10.30–10.50** **Frank ZAUCKE** *(Germany)*
*A novel function for cartilage oligomeric matrix protein in collagen secretion*

**10.50–11.10** **Paolo BONALDO** *(Italy)*
*Collagen VI, a key matrix protein at the crossroad of skeletal muscle and peripheral nerves*

**11.10–11.30** **Fabio QUONDAMATTEO** *(UK)*
*When Anatomy meets Collagen..... How the Anatomist adds to the phenotype of mutants*

### *Selected Talks (ST6–ST10)*

**11.30–11.42** **Barbara BRODSKY** *(USA)*
*The effect of Gly substitutions in the collagen triple–helix on binding to integrin and fibronectin*

**11.42–11.54** **Tiina PETAISTO** *(Finland)*
*Collagen XVIII regulates energy metabolism and brown adipose tissue function*

**11.54–12.06** **Wayne A. CABRAL** *(USA)*
*Absence of the ER cation channel TMEM38B/TRIC–B disrupts intracellular calcium homeostasis and dysregulates collagen synthesis in recessive osteogenesis imperfecta*

**12.06–12.18** **Melanie MENARA** *(France)*
*Succinate mediates extracellular matrix remodeling to promote an invasive phenotype: a new function for oncometabolites*

**12.18–12.30** **Josephine A. ADAMS** *(UK)*
*Novel role of Thrombospondin–1 as a binding partner of collagen cross–linking sites: Functional implication in modulation of myofibroblastic differentiation*

**12.30–13.30** **POSTER SESSION I (P1–P61, P133, P134) / Light Lunch**

**OLYMPIA HALL**

Chair Persons: I. SAGI (Israel) & A. ROSSI (Italy)

**13.30–14.00** **Plenary Lecture (L10): François–Xavier MAQUART** *(France)*
*Mechanisms of the anti–tumor effects of NC1(XIX), the C–terminal domain of type XIX collagen*

**14.00–14.30** **Plenary Lecture (L11): Alberto PASSI** *(Italy)*
*Epigenetic control of hyaluronan synthases*

**14.30–14.45** **Break**

**14.45–16.45** **PARALLEL WORKSHOPS 3 & 4**

**OLYMPIA HALL**

**14.45–16.45** **WORKSHOP 3:**
**Enzyme control of matrix function in health and disease**

Chair Persons: Y. ITOH (UK) & D. SGOURAS (Greece)

***Invited Lectures (L12–L14)***

**14.45–15.05** **Yoshifumi ITOH** *(UK)*
*Sensing and cutting in pericellular microenvironment: essential processes for cellular invasion*

**15.05–15.25** **Ralph D. SANDERSON** *(USA)*
*The heparanase/syndecan–1 axis in cancer: Mechanisms and therapy*

**15.25–15.45** **David J.S. HULMES** (*France)*
*Why collagen I is normally a heterotrimer*

***Selected Talks (ST11–ST15)***

**15.45–15.57** **Christine BROSTJAN** *(Austria)*
*Proteolytic processing of human thrombospondin–1*

**15.57–16.09** **Joan C. MARINI** *(USA)*
*First X–linked form of osteogenesis imperfecta, caused by mutations in MBTPS2, demonstrates a fundamental role for regulated intramembrane proteolysis in normal bone formation*

**16.09–16.21** **Laurent MULLER** *(France)*
*Lysyl oxydase like–2 (LOXL2) regulates angiogenesis through scaffolding of endothelial basement membrane*

**16.21–16.33** **Raymond P. BOOT–HANDFORD** *(UK)*
*Stimulation of intracellular proteolysis reduced disease severity in an ER stress–related cartilage pathology*

**16.33–16.45** **Laura DUPONT** *(Belgium)*
*Embryonic lymphangiogenesis and placental angiogenesis are altered in absence of Adamts3*

**ATTICA HALL**

**14.45–16.45** **WORKSHOP 4:**
**Epigenetics, Systems Biology and Stem Cell Niche**

Chair Persons: S. RICARD–BLUM (France) & J. KAPYLA (Finland)

***Invited Lectures (L15–L17)***

**14.45–15.05** **Sylvie RICARD–BLUM** *(France)*

*The interaction network connecting angiogenesis and Alzheimer's disease: focus on endostatin, lysyl oxidase and membrane collagens*

**15.05–15.25** **Sandra WILEY** *(USA)*
*Phosphorylation of secreted proteins by a new family of kinases*

**15.25–15.45** **Martin GOTTE** *(Germany)*
*MicroRNA miR–142–3p inhibits breast cancer cell invasiveness and stem cell properties by targeting integrin alpha V, KLF4 and multiple cytoskeletal elements*

***Selected Talks (ST16–ST20)***

**15.45–15.57** **Shireen R. LAMANDE** *(Australia)*
*A dominant TRPV4 mutation underlies osteochondrodysplasia in Scottish fold cats*

**15.57–16.09** **Florence FLICK** *(France)*
*Chromatin plasticity directs the fate of healthy cells and cancer cells on soft matrices*

**16.09–16.21** **Zoi PIPERIGKOU** *(Greece; Germany)*
*MicroRNA targeting as a regulatory mechanism of breast cancer cells with different estrogen receptor status*

**16.21–16.33** **Mario RASPANTI** *(Italy)*
*Different sugar epitopes drive the cells to different fates*

**16.33–16.45** **Magdalena KROCHMAL** *(Greece)*
*Comprehensive meta–analysis of proteomics data in search for novel signatures associated with extracellular matrix remodeling in chronic kidney disease*

**16.45–18.00** **POSTER SESSION I (P1-P61, P133, P134) / Coffee / MBE Contact Persons Meeting**

**OLYMPIA HALL**

Chair Persons: L. SCHAEFER (Germany) & R. FAESSLER (Germany)

**18.00–18.30** **Plenary Lecture (L18): Rupert Timpl Award Lecture**
**Alexander NYSTROEM** *(Germany)*
*Delineation of disease modifiers allows for treatment of basement membrane–linked skin disorders*

**18.30–19.00** **Plenary Lecture (L19): Irit SAGI** *(Israel)*
*Extracellular matrix proteolysis: a bystander or a partner in a crime?*

# MONDAY, JUNE 13th, 2016

**OLYMPIA HALL**

Chair Persons: R. BANK (The Netherlands) & E. PAPADIMITRIOU (Greece)

**09.00–09.30** **Plenary Lecture (L20): Martin J. HUMPHRIES** *(UK)*
*CDK1 inhibition triggers adhesion remodelling prior to mitosis*

**09.30–10.00** **Plenary Lecture (L21): Joachim P. SPATZ** *(Germany)*
*Collective cell migration induced by mechano– and synthetic Biology*

**10.00–10.10** "*Ruth Chiquet–Ehrismann: A Tribute to her Research*" by **Josephin ADAMS** (UK)

**10.10–10.40** **Coffee Break**

**10.40–12.50** **PARALLEL WORKSHOPS 5 & 6**

## OLYMPIA HALL

**10.40–12.40 WORKSHOP 5:**
**Cell adhesion, signaling and the tumour environment**

Chair Persons: B. GEIGER (Israel) & V. KOSTOUROU (Greece)

### *Invited Lectures (L22–L24)*

**10.40–11.00 Francesco RAMIREZ** *(USA)*
*ECM mechanosignaling*

**11.00–11.20 Peter FRIEDL** *(The Netherlands; USA)*
*Mechanics of cancer cell invasion in vivo*

**11.20–11.40 Benny GEIGER** *(Israel)*
*Cell adhesion, signaling and the tumor environment*

### *Selected Talks (ST21–ST25)*

**11.40–11.52 Ritva HELJASVAARA** *(Finland)*
*Collagen XVIII regulates EGFR–HER2 signaling in breast cancer and its knockdown augments the effect of anti–ErbB drugs*

**11.52–12.04 Christos G. ZERVAS** *(Greece)*
*A novel mechanosensing role of Integrin–Linked Kinase, Parvin and PINCH in cell–matrix adhesion reinforcement in Drosophila*

**12.04–12.16 Christine JEAN** *(France)*
*FAK activity within cancer–associated fibroblasts is a key regulator of pancreatic ductal adenocarcinoma invasion*

**12.16–12.28 Pugazendhi M. ERUSAPPAN** *(Norway)*
*Signaling function of Integrin alpha 11 cytoplasmic tail*

**12.28–12.40 Lamprini SKONDRA** *(Greece)*
*Effect of moesin on cell migration induced by pleiotrophin*

## ATTICA HALL

**10.40–12.50 WORKSHOP 6:**
**Tissue engineering from a matrix perspective**

Chair Persons: F. QUONDAMATTEO (UK) & D. DELIGIANNI (Greece)

### *Invited Lectures (L25–L27)*

**10.40–11.00 Garry P. DUFFY** *(Ireland)*
*Living implants to reverse disease: Diabetes Reversing Implants for long term Viability and Efficiacy (DRIVE)*

**11.00–11.20 Julie FRADETTE** *(Canada)*
*Soft–tissue reconstruction solely based on cell derived matrix organization: the benefits of the self–assembly approach of tissue engineering*

**11.20–11.40 John WHITELOCK** *(Australia)*
*Perlecan is critical for tissue and organ development but does it have a role in tissue engineering?*

### *Selected Talks (ST26–ST31)*

**11.40–11.52 Won Bae JEON** *(South Korea)*
*Signaling mechanisms for the enhanced survival of adipose stem cells in elastin–like extracellular matrix*

**11.52–12.04** **Attila ASZODI** *(Germany)*
*FGF–2 treatment primes ADMSC chondrogenesis by increasing the expression of integrin alpha10*

**12.04–12.16** **Mona E. PEDERSEN** *(Norway)*
*Eggshell membrane – An equivalent of extracellular matrix (ECM) in avian egg has modulating wound healing properties*

**12.16–12.28** **Maurice van DALEN** *(The Netherlands)*
*Amyloid micronetworks in cartilage repair: a protein specific response*

**12.28–12.40** **Inna KORNIENKO** *(Russia)*
*Low–immunogenic matrix suitable for transplantation*

**12.40–12.50** **Iratxe MADARIETA** *(Spain)*
*Biologic scaffold materials composed of adipose tissue*

**12.50–14.00** **POSTER SESSION II (P62-P132, P135, P136) / Light Lunch**

**14.00–16.00** **Free time / Visit – guided tour to the New Acropolis Museum *(optional)***

**OLYMPIA HALL**

Chair Persons: V. HASCALL (USA) & D. KLETSAS (Greece)

**16.15–16.45** **Plenary Lecture (L28): Liliana SCHAEFER** *(Germany)*

**16.45–18.15** **Dick Heinegard European Young Investigator Award Presentations *(ST32–ST37)***

**16.45–17.00** **Nikolaos AFRATIS** *(Greece)*
*Syndecan–4 is a key modulator of epithelial–to–mesenchymal transition in breast cancer cells*

**17.00–17.15** **Collin EWALD** *(Switzerland)*
*Reduced insulin/IGF–1–signalling implicates extracellular matrix remodelling in longevity*

**17.15–17.30** **Edward R. HORTON** *(UK)*
*Integrative analysis of multiple integrin adhesion complex proteomes defines a core consensus adhesome and reveals how it might work*

**17.30–17.45** **Albin JEANNE** *(France)*
*Matricellular TSP–1 as a target of interest for facing tumor progression: towards a therapeutic use for TAX2 peptide*

**17.45–18.00** **Zsuzsa JENEI–LANZL** *(Germany)*
*Mesenchymal progenitor cell chondrogenesis, hormones, and neuronal pathways – a role of G protein–coupled receptors*

**18.00–18.15** **Luca MONTI** *(Italy)*
*Animal models of Desbuquois Dysplasia type 1 demonstrate CANT1 role in proteoglycan metabolism*

**18.15–19.00** **MBE General Assembly**

**19.00–20.30** **POSTER SESSION II (P62-P132, P135, P136) / Coffee**

**21.00–23.00** **Conference Dinner**

# TUESDAY, JUNE 14th, 2016

## OLYMPIA HALL

Chair Persons: D. HULMES (France) & N. SAVION (Israel)

**09.00–09.30** **Plenary Lecture (L29): Reinhard FAESSLER** *(Germany)*
*Genetic analysis of integrin signalling in mice*

**09.30–10.00** **Plenary Lecture (L30): Jeremy Ewan TURNBULL** *(UK)*
*Next generation heparin therapeutics: targeting proteoglycan functions*

**10.00–10.30** **Coffee Break**

**10.30–12.30** **PARALLEL WORKSHOPS 7 & 8**

## OLYMPIA HALL

**10.30–12.30** **WORKSHOP 7:**
**Cell/matrix interactions in matrix biology and pathology**

Chair Persons: M. DURBEEJ (Sweden) & D. VYNIOS (Greece)

### *Invited Lectures (L31–L33)*

**10.30–10.50** **Rashmin C. SAVANI** *(USA)*
*CD44 is critical for TLR activation of the inflammasome and the evolution of lung injury: from mice to man*

**10.50–11.10** **Madeleine DURBEEJ** *(Sweden)*
*Laminin α2 chain–deficient muscular dystrophy: pathogenesis and development of treatment*

**11.10–11.30** **Antonella FORLINO** *(Italy)*
*Osteogenesis Imperfecta: not only an extracellular matrix disease*

### *Selected Talks (ST38-ST42)*

**11.30–11.42** **Pearl LEE** *(Australia)*
*A potent cell adhesive peptide from tropoelastin that mediates attachment to both integrins alphaVbeta5 and alphaVb3*

**11.42–11.54** **Jacek DROBNIK** *(Poland)*
*Inhibition of α2β1 integrin by TC–I15 increases collagen accumulation by cultured fibroblasts isolated from the heart atrium of patients with aortic stenosis*

**11.54–12.06** **Vassiliki KOSTOUROU** *(Greece)*
*Talin 1 dysfunction is associated with the Systemic Capillary Leak Syndrome*

**12.06–12.18** **Davide VIGETTI** *(Italy)*
*The long non–coding RNA HAS2–AS1 is a new regulator of breast cancer cells invasiveness*

**12.18–12.30** **Maria Francesca SECCHI** *(Italy)*
*The role of Heparanase in chronic liver disease fibrogenesis*

**ATTICA HALL**

## 10.30–12.30 WORKSHOP 8:
**Advances in matrix disease mechanisms and pharmacological targeting**

Chair Persons: S. LAMANDE (Australia) & M. FRANCHI (Italy)

### *Invited Lectures (L34–L36)*

**10.30–10.50** **Ruud A. BANK** *(The Netherlands)*
*Combatting fibrosis: new ways to inhibit myofibroblast formation or pyridinoline cross–linking*

**10.50–11.10** **Achilleas D. THEOCHARIS** *(Greece)*
*Serglycin as a key proteoglycan in cellular effectors, signaling and functional properties of ERalpha silenced breast cancer cells*

**11.10–11.30** **Kirsi Johanna RILLA** *(Finland)*
*Hyaluronan–coated extracellular vesicles as potential biomarkers and matrix messengers*

### *Selected Talks (ST43–ST47)*

**11.30–11.42** **Taina PIHLAJANIEMI** *(Finland)*
*Properties and functions of collagen XIII and other MACIT collagens*

**11.42–11.54** **Dragana NIKITOVIC** *(Greece)*
*Receptor for hyaluronic acid– mediated motility (RHAMM) regulates HT1080 fibrosarcoma cell proliferation via a β–catenin/c–myc signaling axis*

**11.54–12.06** **Qing–Jun MENG** *(UK)*
*The circadian clock gene Bmal1 is required for cartilage tissue homeostasis*

**12.06–12.18** **Marco MACCARANA** *(Sweden)*
*Isolated iduronic acids in chondroitin/dermatan sulfate are important for neural crest cell migration*

**12.18–12.30** **Dionyssios N. SGOURAS** *(Greece)*
*Expression of factors responsible for extracellular matrix remodeling leading to epithelial to mesenchymal transition in Helicobacter pylori infection*

**12.30–12.40** **Break**

**OLYMPIA HALL**

Chair Persons: J. TURNBULL (UK) & G. CHRISTENSEN (Norway)

## 12.40–13.40 PLENARY WORKSHOP

### *Invited Lectures (L37–L39)*

**12.40–13.00** **Dimitrios KLETSAS** *(Greece)*
*Ionizing radiation–mediated premature senescence of stromal fibroblasts: Implications in tumor development*

**13.00–13.20** **Vincent C. HASCALL** *(USA)*
*The non–reducing terminal trisaccharide of heparin blocks glucose uptake in hyperglycemic dividing cells*

**13.20–13.40** **Anthony J. DAY** *(UK)*
*Age–related changes in the retinal matrix and induction of disease pathways relevant to AMD*

**OLYMPIA HALL**

Chair Persons: R.V. IOZZO (USA) & N. KARAMANOS (Greece)

**13.40–14.10** **Awards/Closing Ceremony**

# List of Posters / Selected Talks

## POSTER SESSION I (P01 – P61)

ST01/P01 **Perlecan expression influences the keratin 15-positive cell population fate in the epidermis of aging skin**

**Patricia Rousselle[1], Anna Michopoulou[1], Morgan Dos Santos[1,2], Sophie Boulesteix[1], Christine Guicher[1], Guila Dayan[1], John Whitelock[3], Odile Damour[1,4], and Valérie André-Frei[2]**

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ST02/P02 **Syndecan-4 is important for normal skeletal muscle fibre development**

**Sissel B. Rønning[1], Cathrine R. Carlson[2,3], Vibeke Høst[1,] Jan Magnus Aronsen[2,], Espen Stang[4], Svein O. Kolset[5], Geir Christensen[2], Mona E. Pedersen[1]**

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ST03/P03 **Hyal-1 deficiency protects the endothelium in a mouse diabetic model**

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ST04/P04 **The role of versican in semicircular canal development in the zebrafish inner ear and in cancer progression**

**Elvira Diamantopoulou[1,2], Sarah Baxendale[1], Celia J. Holdsworth[1], Daniel W. Lambert[2] and Tanya T. Whitfield[1]**

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ST05/P05 **Lumican Inhibits SNAIL-Induced Melanoma Cell Migration Specifically by Blocking MMP-14 Activity**

**Stasiak M[1,2], Boncela J[3], Perreau C[1], Karamanou K[1,4], Chatron-Colliet A[1], Proult I[1], Przygodzka P[3], Chakravarti S[5], Maquart FX[1,6], Kowalska MA[3,7], Wegrowski Y[1], Brézillon S[1]**

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P06 **Ext proteins in breast cancer cell lines**

**Lawrence Fred Sembajwe, Kirankumar Katta and Marion Kusche-Gullberg**
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P07 **Glypican-6 is upregulated in heart failure and mediates cardiomyocyte growth through ERK1/2 signaling**

**AO Melleby[1,2], ME Strand[1,2], KM Herum[1,2], B Skrbic[1,2,3], CP Dahl[2,4,5], I Sjaastad[1,2], AE Fiane[3], J Filmus[6], G Christensen[1,2], IG Lunde[1,2]**
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P08 **Fourier transform infrared microspectroscopy and imaging of non-inflammatory and inflammatory breast cancer cell lines and tissues: glycosaminoglycans as potential spectral markers?**

**H.T. Mohamed[1,2,3], G.D. Sockalingum [1,2,4],V. Untereiner [2,4,5], M. El-Shinawi[6], S.A. Ibrahim[3], M. Götte[7], F-X. Maquart[1,2,8], M.M. Mohamed[3] and S. Brézillon[1, 2]**
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P09 **Inflammatory oxidants modify components of the extracellular matrix of human atherosclerotic lesions**

**Christine Y. Chuang[1], Georg Degendorfer[2,3], Lasse Lorentzen[1], Astrid Hammer[4], John M. Whitelock[5], Ernst Malle[6] and Michael J. Davies[1]**
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P10 **Syndecan-4 expression is upregulated in endometriosis and contributes to an invasive phenotype**

**Anca Chelariu-Raicu, Cornelia Wilke, Melanie Brand, Anna Starzinski-Powitz, Ludwig Kiesel, Andreas N. Schüring, Martin Götte**
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P11 **Evaluation of the activity of Lumican in the functional properties of matrix molecules of breast cancer cells of different estrogen receptor patterns**

**K. Karamanou[1,2,3], S. Brézillon[1,2], Y. Wegrowski[1,2], F-X. Maquart[1,2,4], P. Bouris[3], D. Vynios[3]**
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P12 **Glycocalyx in endothelium inflammation: changes in both glycosaminoglycans and proteoglycans**
**Viola Manuela, Elena Caravà, Vigetti Davide, Karousou Evgenia, Moretto Paola, De Luca Giancarlo, Passi Alberto**
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P13 **IGF-IR / biglycan signaling axis regulates osteosarcoma cell growth**
**Aggelidakis John, Berdiaki Aikaterini, Kavasi Rafaela-Maria, Mantas Ioannis, Nikitovic Dragana, Tzanakakis N. George**
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P14 **The effect of serglycin's suppression on various cellular aspects of glioblastoma cell line LN-18**
**Dimitra Manou, Panagiotis Bouris, Anastasia Sopaki-Valalaki, Anthi Kolokotroni, Achilleas D. Theocharis**
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P15 **IGF-I regulates HT1080 cell migration through Syndecan 2 and Erk1/2 dependent signaling**
**Mytilinaiou Maria, Nikitovic Dragana, Voudouri Kallirroi, Kechagias Konstantinos, Berdiaki Aikaterini, Tzanakakis N. George**
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P16 **The role of Collagen XVIII in murine kidney development and function**
**Mia Rinta-Jaskari, Heli Ruotsalainen, Florence Naillat, Ilkka Pietilä, Inderjeet Kaur, Seppo Vainio and Taina Pihlajaniemi**
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P17 **Loss of ERα triggers the synthesis of hyaluronan and induces the expression and redistribution of CD44 and moesin in breast cancer cells**
**Th. Karalis[1], G. Liapis[1], M. Kentros[1], C. Koliopoulos[2], E. Papadimitriou[3], D.H. Vynios[1], P. Heldin[2], N.K. Karamanos[1], S.S. Skandalis[1]**
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P18 **Hyaluronan in vitro modulation of macrophages in colorectal adenocarcinoma microenvironment**
**Spinelli FM, Vitale D, Alaniz L.**
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ST06/P19 **The Effect of Gly substitutions in the Collagen Triple-helix on Binding to Integrin and Fibronectin**
**Barbara Brodsky, Panharith Chhum, Sezin Yigit, Yu-Shan Lin, Hongtao Yu, and Bo An**
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ST07/P20 **Collagen XVIII regulates energy metabolism and brown adipose tissue function**
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ST08/P21 **Absence of the ER cation channel TMEM38B/TRIC-B disrupts intracellular calcium homeostasis and dysregulates collagen synthesis in recessive osteogenesis imperfect**

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ST09/P22 **Succinate mediates extracellular matrix remodeling to promote an invasive phenotype: a new function for oncometabolites**

**Mélanie MENARA[1, 2], Céline LORIOT[1, 2], Luis-Jaime CASTRO-VEGA[1, 2], Catherine MONNOT[4], Laurent MULLER[4], Stéphane GERMAIN[4], Anne-Paule GIMENEZ-ROQUEPLO[1, 5], Judith FAVIER[1, 2]**
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ST10/P23 **Novel role of Thrombospondin-1 as a binding partner of collagen cross-linking sites: functional implication in modulation of myofibroblastic differentiation**

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P24 **Carbamylation of matrix proteins as a marker of aging**

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P25 **The role of collagen XVIII in squamous cell carcinoma of the lung**
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P26 **Ageing of human optic nerve head connective tissue**
**Albon J[1-3], Jones HJJ[1-3], Boote C[2,4], Meek KM[2,4], White N[2,3]**
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P27 **Thermodynamic calculations of Advanced Glycation End-product cross-linked collagen packing**
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P28 **A novel endoplasmic reticulum complex regulating collagen lysyl hydroxylation**
**Roberta Besio[1*], Melissa E. Heard[1], MaryAnn Weis[3], Jyoti Rai[3], David M. Hudson[3], Milena Dimori[1], Sarah M. Zimmerman[1], Jeffrey A. Kamykowski[1], William R. Hogue[4], Frances L. Swain[4], Marie S. Burdine[2], Samuel G. Mackintosh[2], Alan J. Tackett[2], Larry J. Suva[4], David R. Eyre[3], Roy Morello[1]**
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P29 **Regulation of post-Golgi LH3 trafficking is essential for collagen homeostasis**
**Blerida Banushi, Ania Straatman Iwanowska Ania., Kevin Mills, Paul Gissen**
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P30 **Type III collagen is important for type I collagen fibrillogenesis and for dermal and cardiovascular development**
**Sanne D'hondt[1], Brecht Guillemyn[1], Sofie Symoens[1], Riet De Rycke[2], Yoshi Ishikawa[3], Hans Peter Bächinger[3], Sophie Janssens[2], Mathieu Bertrand[2], Fransiska Malfait[1]**
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P31 **Distinct structure and composition of the vascular basement membrane in pulmonary hypertension**
**Katharina Jandl[1,2*], Julia Hoffmann[1*], Bahil Ghanim[1,3], Walter Klepetko[3], Gabor Kovacs[4], Wilhelm**

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P32 **Severe extracellular matrix abnormalities in mice lacking collagen prolyl 4-hydroxylase isoenzyme II in combination with a reduced amount of isoenzyme I**

**Antti M. Salo[1], Jussi-Pekka Tolonen[1], Ellinoora Aro[1], Richa Khatri[2], Mikko Finnilä[3], Ilkka Miinalainen[4], Raija Sormunen[5], Raija Soininen[1], Juha Tuukkanen[3], Kari I. Kivirikko[1], Ernestina Schipani[2] & Johanna Myllyharju[1]**
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P33 **Collagen prolyl 4-hydroxylase mutant mice reveal importance of 4-hydroxyproline in collagen fibril formation and matrix organization in skin**

**Kati Drushinin[1], Antti M. Salo[1], Ilkka Miinalainen[2], Raija Sormunen[2,3], Kari I Kivirikko[1] & Johanna Myllyharju[1]**
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P34 **Identification of novel HSP47 clients**

**Anna Köhler[1,2], Gerhard Sengle[1], Ulrich Baumann[2] and Frank Zaucke[1]**
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P35 **A comparison of preferential sites for glucosepane and DOGDIC formation in fibrillar type I collagen and their effect on the properties of fibrallar collagen**

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P36 **Long term effects of growth hormone on cartilage homeostasis**

**Yolande F.M. Ramos[1], Kim Claessens[2], Nienke Biermasz[2], Ingrid Meulenbelt[1]**
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P37 **The role of extracellular matrix in zebrafish regeneration: from a global transcriptomic analysis to the multifaceted role of collagen XIV**

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P38 **A modified technique to assess extracellular matrix turnover rate using aspartic acid racemisation**
**Maria Notou, Andrea F. Lopez-Clavijo, Helen L. Birch**
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P39 **Tensile response of tendon collagen fibrils in relation to cross-links**
**Rene B. Svensson[1], Patrick J. Moyer[2], Stuart T. Smith[3], S. Peter Magnusson[1]**
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ST11/P40 **Proteolytic Processing of Human Thrombospondin-1**
**Seif K, Alidzanovic L, Starlinger P, Zommer A, Brostjan C**
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ST12/P41 **First X-linked form of osteogenesis imperfecta, caused by mutations in *MBTPS2*, demonstrates a fundamental role for regulated intramembrane proteolysis in normal bone formation**
**Joan C. Marini[1], Uschi Lindert[2], Wayne A. Cabral[1], Surasawadee Ausavarat[3,4,5], Siraprapa Tongkobpetch[3,4], Katja Ludin[6], Aileen M. Barnes[1], Patra Yeetong[3,4,7], Maryann Weis[8], Birgit Krabichler[9], Chalurmpon Srichomthong[3,4], Elena Makareeva[10], Andreas R. Janecke[9,11], Sergey Leikin[10], Benno Röthlisberger[6], Marianne Rohrbach[2], Ingo Kennerknecht[12], David R. Eyre[8], Kanya Suphapeetiporn[3,4], Cecilia Giunta[2], Vorasuk Shotelersuk[3,4]**
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ST13/P42 **Lysyl oxydase like-2 (LOXL2) regulates angiogenesis through scaffolding of endothelial basement membrane**
**Claudia Umana[1], Cathy Pichol-Thievend[1], Marion Marchand[1], Romain Salza[2], Sylvie Ricard-Blum[2], Catherine Monnot[1], Christophe Guilluy[3], Stéphane Germain[1], Laurent Muller[1]**
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ST14/P43 **Stimulation of intracellular proteolysis reduced disease severity in an ER stress-related cartilage pathology**

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ST15/P44 **Embryonic lymphangiogenesis and placental angiogenesis are altered in absence of Adamts3**

**L Dupont[1], L Janssen[1], M Bekhouche[1], A Noel[2], C Leduc[1], M Voz[3], B Peers[3], D Cataldo[2], SS Apte[4], J Dubail[1,4], A Colige[1]**

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P45 **Processing of thrombospondin-1 by bone morphogenetic protein-1 strongly alters its ability to promote cell adhesion and to activate TGF-β**

**Cyril Anastasi[1], Alice Bachmann[1], Agnès Tessier[1] Laëtitia Fortin[1], Sandrine Vadon-Le Goff[1], Lindsay Alcaraz[2], Ulrich Valcourt[2], Patricia Rousselle[1] and Catherine Moali[1]**

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P46 **Unveiling new functions of ADAMTS2, 3 and 14 in extracellular matrix organization and cell signalling using a N-terminomics approach**

**Leduc C.[1], Bekhouche M.[1], Dupont L.[1], Janssen L.[1], Delolme F.[2], Smargiasso N.[3], Baiwir D.[3], Mazzucchelli G.[3], Vadon-Le Goff S.[2], Zanella-Cleon I.[2], De Pauw E.[3], Nusgens B.[1], Moali C.[2] and Colige A.[1]**

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P47 **The propeptide of lysyl oxidase, a new partner of cross-linking enzymes and proangiogenic factors**

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P48 **Integration of proteomics and peptidomics data towards identifying kidney-specific proteolytic events associated with Chronic Kidney Disease progression**

**Szymon Filip[1, 2], Claudia Pontillo[2, 3], Andrew Smith[4], Magdalena Krochmal[1, 5], Jerome Zoidakis[1], William Mullen[6], Harald Mischak[3, 6], Antonia Vlahou[1]**

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P49 **Expression of ADAMTS4 and ADAMTS6 in Snail overexpessing melanoma and colon adenocarcinoma cells: effect of lumican**

**S. Vasileiou[1,2,3], D. H. Vynios[3], F-X. Maquart[1,2,4], Y. Wegrowski[1,2], S. Brézillon[1,2]**

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P50 **Extracellular matrix involvement during zebrafish regeneration: highlight on the MMP/TIMP balance**
**Lambert Elise, Nauroy Pauline, Liot Sophie, Vaganay Elisabeth, Benjamin Gillet, Sandrine Hughes and Ruggiero Florence**
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P51 **Expression of ADAMTS in breast cancer cells**
**N. Georgakopoulou, S. Vasileiou, P. Bouris, Th. Karalis, S. Skandalis, A. D. Theocharis, N. K. Karamanos, D. H. Vynios**
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P52 **Laminin 111 Phosphorylation an in silico study**
**Kleio Verrou and George Koliakos**
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P53 **Expression of hyaluronidases in Head & Neck cancers**
**M. Catela[1], A. Kontoni[1], Th. A. Papadas[2], N. S. Mastronikolis[2], D.H. Vynios[1]**
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ST16/P54 **A dominant *TRPV4* mutation underlies osteochondrodysplasia in Scottish fold cats**
**B. Gandolfi[1], S. Alamri[2], W.G. Darby[3], B. Adhikari[4], J.C. Lattimer[1], R. Malik[5], C.M. Wade[6], L.A. Lyons[1], J. Cheng[4], J.F. Bateman[7], P. McIntyre[3], S.R. Lamandé[2], B. Haase[6]**
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ST17/P55 **Chromatin plasticity directs the fate of healthy cells and cancer cells on soft matrices**
**Florence Flick[1,2,3], Morgane Rabineau[1,2,3], Eric Matthieu[1,2,3], Bernard Senger[1,2,3], Philippe Lavalle[1,2,3], Pierre Schaaf[1,2,3], Jean-Noël Freund[3,4], Youssef Haikel[1,2,3], Dominique Vautier[1,2,3]**
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ST18/P56 **MicroRNA targeting as a regulatory mechanism of breast cancer cells with different estrogen receptor status**
**Zoi Piperigkou[1,2], Martin Götte[2], Nikos K. Karamanos[1]**
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ST19/P57 **Different sugar epitopes drive the cells to different fates**

**A.Sgambato[1], L.Russo[1], A.Natalello[1], M.Lecchi[1], V.Pastori[1], L. Cipolla[1], M.Montesi[2], S.Panseri[2], E.Caravà[3], M.Raspanti[3]**

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ST20/P58 **Comprehensive meta-analysis of proteomics data in search for novel signatures associated with extracellular matrix remodeling in chronic kidney disease**

**Magdalena Krochmal[1,2], Szymon Filip[1,3], Claudia Pontillo[3,4], Joachim Jankowski[2,5], Jerome Zoidakis[1], Harald Mischak[5,6], Antonia Vlahou[1]**

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P59 **The heparan sulfate proteoglycan Syndecan-1 regulates colon cancer stem cell function via a focal adhesion kinase – Wnt signaling axis**

**Sampath Kumar Katakam[1], Valeria Tria [2], Wey-Cheng Sim [3], George W. Yip [3], Stefano Molgora [2], Thodoris Karnavas [4], Ileana Zucchi [2], Rolland Reinbold [2], Burkhard Greve [5], Martin Götte [1]**

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P60 **Modification of Mesenchymal Stem Cell-Derived Exosomes: Potential for Breast Cancer Therapy**

**KP O'Brien[1], S Khan[1], R Smyth[1], DP Joyce[1], P Lalor[2], K Thompson[2], P Dockery[2], MJ Kerin[1], RM Dwyer[1]**

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P61 **Cell Lineage Perspectives of Cutaneous Scarring**

**Yuval Rinkevich**

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## POSTER SESSION II (P62 – P132)

ST21/P62 **Collagen XVIII regulates *EGFR-HER2* signaling in breast cancer and its knockdown augments the effect of anti-*ErbB* drugs**

**Devarajan Raman[1,2,3], Ruotsalainen Heli[1,3], Izzi Valerio[1,3], Karppinen Sanna-Maria[1,3], Martinez-Nieto**

**Guillermo[1,3], Kaur Inderjeet[1,3], Kauppila Saila[4], Koivunen Jussi[5], Bose Mutiah[2,3], Winqvist Robert[2,3], Peltoketo Hellevi[2,3], Pihlajaniemi Taina[1,3], and Heljasvaara Ritva[1,3]**

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ST22/P63 **A novel mechanosensing role of Integrin-Linked Kinase, Parvin and PINCH in cell-matrix adhesion reinforcement in *Drosophila***

**Katerina M. Vakaloglou[1], Georgios Chrysanthis[2], Maria Anna Rapsomaniki[3], Zoi Lygerou[3] and Christos G. Zervas[1,4]**

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ST23/P64 **FAK activity within Cancer-associated fibroblasts is a key regulator of pancreatic ductal adenocarcinoma invasion**

**Christine Jean, Emilie Decaup, Stéphanie Cassant-Sourdy, Rémi Samain, Yvan Martineau, Stéphane Pyronnet, Corinne Bousquet**

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ST24/P65 **Signaling function of Integrin alpha 11 cytoplasmic tail**

**Pugazendhi M. Erusappan[1], Ida W. Sørensen[1], Cédric Zeltz[1], Ning Lu[1], Marion Kusche-Gullberg[1] and Donald Gullberg[1]**

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ST25/P66 **Effect of moesin on cell migration induced by pleiotrophin**

**Lamprini Skondra[1,@], Sotiria Tsirmoula[1,@], Marina Koutsioumpa[1,#], Constantinos Mikelis[1,$], Spyros Skandalis[2,3], Ulf Helman[2], Evangelia Papadimitriou[1,*]**

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P67 **Effect of cell surface nucleolin on vascular endothelial growth factor A signaling related to endothelial cell migration**

**Effrosini Choleva, Evangelia Poimenidi, Marina Koutsioumpa[#], Evangelia Papadimitriou**

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P68 **Deciphering the cell and non cell-autonomous contribution of LOXL2 to tumor angiogenesis in 3D systems**

**Catherine Monnot[1,2,3], Virginie Lelarge,[1,2,3,4] Guillaume Blot,[1,2,3,5] Laurent Bidault, [1,2,3] Cathy Pichol-Thievend,[1,2,3,4] Claudia Umana-Diaz,[1,2,3,4] Corinne Ardidie-Robouant,[1,2,3] Jérôme Verine,[6,7,8] Anne Janin, [6,7,8] Laurent Muller,[1,2,3] Stephane Germain[1,2,3,8]**

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P69 **Transcriptional expression of CD44 is related with metastatic potential of breast cancer cells**

**H. Karageorgou, D. Georgiou, D. Lampadas, P. Bouris, Th. Karalis, S. Skandalis, A. D. Theocharis, N. K. Karamanos, D. H. Vynios**
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P70 **Heparan sulfate 2-O sulfotransferase-dependent signalling pathways determine breast cancer cell-matrix interactions, cell motility, viability and invasive growth**

**Archana Vijaya Kumar[1], Benedikt Mohr[1], Björn Kemper[2] , Sampath Kumar Katakam[1], Burkhard Greve[3], Dorothe Spillmann[4], Martin Götte[1]**
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P71 **Sox9 influences apoptosis, adhesion and differentiation capacity in a human chondrosarcoma and osteosarcoma cell line**

**S. Stoeckl[1,2], C. Göttl[1,2], F. Wagner[1], S. Grässel[1,2]**
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P72 ***In vitro* studies of the novel protein 7z3e2: role on hyaluronan regulation in breast tumor microenvironment**

**Eugenia Karousou, Maria Luisa D'Angelo, Davide Vigetti, Manuela Viola, Ilaria Caon, Elena Caravà, Giancarlo De Luca, Alberto Passi.**
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P73 **Role of integrin β1 and pleiotrophin in the chick cerebellum morphogenesis**

**Vasiliki Kommata[1], Elentina Argyrousi[1], George Vassiliou[2], Panagiotis Katsoris[2], Catherine R. Dermon[1]**
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*[2]Division of Genetics, Cell, and Develop. Biology, Dept Biology, Univ. Patras, Patras, Greece*

P74 **Inhibition of intracellular kinases affects cell aggressiveness and expression of proteolytic network molecules in ERα suppressed breast cancer cells**

**A. Papargyriou[1], A. Sopaki-Valalaki[1,2], P. Bouris[1,2], D. Manou[1], A. Moustakas[2], N.K. Karamanos[1], A.D. Theocharis[1]**
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P75 **Signaling through the collagen receptor, DDR1, is required for epithelial polarisation and morphological remodelling in 3D matrix**

**Pernille Søgaard[1] and Yoshifumi Itoh[1]**
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P76 **Hypoxia promotes microvascular endothelial cell interaction with extracellular matrix proteins**
**Christina Befani, Panagiotis Liakos**
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P77 **The signaling pathways of AXL and PDGFR receptor tyrosine kinases mediate the mesenchymal phenotype of ERα-suppressed breast cancer cells**
**Panagiotis Bouris[1,2], Anastasia Sopaki-Valalaki[2], Nikos. K. Karamanos[2], Achilleas D. Theocharis[2], Aristidis Moustakas[1]**
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P78 **Integrin alpha2 in nonactivated conformation can induce Focal Adhesion Kinase signalling**
**Maria Salmela[1], Johanna Jokinen[1], Silja Tiitta[1], Pekka Rappu[1], Holland Cheng[2], Jyrki Heino[1]**
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P79 **Suppression of ERα induces the activation of TGF-β and IL-8 pathways in breast cancer cells**
**A. Sopaki-Valalaki[1,2], A. Moustakas[2], P. Bouris[1,2], D. Manou[1], A. Kolokotroni[1], N.K. Karamanos[1], A.D. Theocharis[1]**
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P80 **Collagen XIII regulates breast cancer in humans and mice**
**Henriksson Charlotta[1,2], Devarajan Raman1[2,3], Ruotsalainen Heli[1,2], Heikkinen Anne[1,2], Härönen Heli[1,2], Heljasvaara Ritva[1,2] and Pihlajaniemi Taina [1,2]**
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P81 **Lysyl oxidase promotes survival and outgrowth of colon cancer cells in the bone marrow, enabling bone metastasis formation**
**Caroline Reynaud, Laura Ferreras, Marie Brevet, Philippe Clézardin**
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P82 **Adhesion Strength and Modeling of Human Bone Cells on Advanced Biomedical Substrates**
**D.V. Portan[1,2], A.A. Kroustalli1, G.C.Papanicolaou[2], D.D. Deligianni[1*]**
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ST26/P83 **Signaling mechanisms for the enhanced survival of adipose stem cells in elastin-like extracellular matrix**
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ST27/P84 **FGF-2 treatment primes ADMSC chondrogenesis by increasing the expression of integrin alpha10**
**M. Kurczyk[1], P. Alberton[1], Z. Farkas[1], C. Prein[1,2], H. Clausen-Schaumann[2], E. Lundgren-Akerlund[3], A. Aszódi[1]**
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ST28/P85 **Eggshell Membrane - An Equivalent of Extracellular Matrix (ECM) in Avian Egg has Modulating Wound Healing Properties**

**Tram T. Vuong[1], Sissel B. Rønning[1], Henri Pierre[2], Enda Kenny[2], Ralf Schmidt[2], Jeff Hart[3], Andrea Bell[3], Kristian Prydz[4] and Mona E. Pedersen[1]**

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ST29/P86 **Amyloid micronetworks in cartilage repair: a protein specific response**

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ST30/P87 **Low-immunogenic matrix suitable for transplantation**

**Inna Kornienko[1], Anna Dukh[1], Anna Guller[2,3], Anatoly Shekhter[2], Svetlana Guryeva[1], Elena Petersen[1]**

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ST31/P88 **Biologic scaffoldmaterials composed of adipose tissue extracellularmatrix**

**Madarieta I., García-Urkia N., Fernandez R., Olalde B., Atorrasagasti G., Bijelic G.**

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P89 **Tension is required for tenogenic gene expression in rat tail tenocytes**

**Andreas Herchenhan, Andreas Hofmann, Olivier Leupin**

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P90 **A biomaterial for cartilage engineering: biophyscochemical characteristics selected for promoting stem cell proliferation and chondrogenesis**

**Elias Al Tawil, Najat Bteich, Alexandre Monnier, Quang Trong Nguyen, Stéphane Marais, Brigitte Deschrevel**

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P91 **Preparation and characterization of nanofibrous polymer scaffolds for cartilage tissue engineering**

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P92 **To differentiate or not to differentiate? The impact of BMP-12 treatment on cells clinically relevant features**

**Weronika Zarychta-Wiśniewska[1], Anna Burdzińska[1], Beata Kaleta[2], Agnieszka Kulesza[1], Kamila Gala[1], Aleksandra Zołocińska[3], Leszek Pączek[1]**

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P93 **Evaluation of consumption rate as a criteria for computational modeling of tissue organoid devepolment**
**Petersen E.V.[1], Ivanova U.D[1], Kornienko I.A.[1], Simakov S.S.[1]**
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ST38/P94 **A potent cell adhesive peptide from tropoelastin that mediates attachment to both integrins alphaVbeta5 and alphaVb3**
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ST39/P95 **Inhibition of a2b1 integrin by TC-I15 increases collagen accumulation by cultured fibroblasts isolated from the heart atrium of patients with aortic stenosis**
**Jacek Drobnik[1], Radosław Zwoliński[2], Anna Krzymińska[1], Lucyna Piera[1], Alicja Szczepanowska[1], Jacek Szymański[3], Ryszard Jaszewski[2], Joanna Ciosek[1]**
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ST40/P96 **Talin 1 dysfunction is associated with the Systemic Capillary Leak Syndrome**
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ST41/P97 **The long non-coding RNA HAS2-AS1 is a new regulator of breast cancer cells invasiveness**
**Davide Vigetti[1], Ilaria Caon[1], Martin Gotte[2], Manuela Viola[1], Evgenia Karousou[1], Elena Caravà[1], Paola Moretto[1], Giancarlo De Luca[1], Alberto Passi[1]**
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ST42/P98 **The role of Heparanase in chronic liver disease fibrogenesis**
**Maria Francesca Secchi [1], Marika Crescenzi [2], Giulia Pesavento[1], Francesco Paolo Russo [2], Annarosa Floreani [2], Maurizio Onisto [1]**
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P99 **Novel biochemical insight into T190M and C667F primary dystroglycanopathies**
**Signorino, G.[1], Hübner, W.[2], Palmieri, V.[3], Bozzi, M.[1], Maulucci, G. [3], De Spirito M. [3] , Brancaccio, A.[4,5] and Sciandra, F.[5]**
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P100 **Interactions of Discoidin Domain Receptors with fibrillar and non-fibrillar collagen forms: ligand binding versus receptor activation**

**Despoina Gavriilidou[1], Uwe Hansen[2] and Birgit Leitinger[1]**

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*[2]Institute for Experimental Muscoskeletal Medicine, University Hospital of Muenster, Muenster, Germany;*

P101 **Molecular mechanisms of ANGPTL4-induced regulation of vascular integrity**

**Athanasia Liabotis[1] , Elisa Gomez-Perdiguero[1] , Ariane Galaup[1] , Clément Faye[2],Sylvie Ricard-Blum[2], Catherine Monnot[1], Stéphane Germain[1]**

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P102 **Insights into the structure of the N-terminal region of α-dystroglycan: a concerted crystallographic and SAXS study**

**Manuela Bozzi[1], Alberto Cassetta[2], Sonia Covaceuszach[2], Peter V. Konarev[3], Maria Giulia Bigotti[4], Francesca Sciandra[5], Andrea Brancaccio[4,5]**

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P103 **Identification of a common binding site for BMPs on TSG-6; a protein with endogenous protective effects in cartilage and bone**

**Elena Valdambrini[1,2], Bethanie Ayerst[1,2], Anthony J. Day[1,2] & Caroline M. Milner[2]**

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P104 **Syndecans as key partners in the interaction between breast cancer cells and endothelium**

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P105 **Impact of substrate modulus of elasticity on human osteoblasts' differentiation and proliferation**

**F.K. Kozaniti, D.D. Deligianni**

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P106 **Ionizing radiation-mediated premature senescence and paracrine interactions with cancer cells enhance the expression of syndecan1 in human breast stromal fibroblasts: the role of TGF-β**

**Eleni Liakou[1], Eleni Mavrogonatou[1], Harris Pratsinis[1], Sophia Rizou[2], Konstantinos Evangelou[2], Petros N. Panagiotou[3], Nikos K. Karamanos[4], Vassilis G. Gorgoulis[5], Dimitris Kletsas[1]**

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P107 **ERβ as a key regulator of extracellular matrix effectors and breast cancer cells aggressive phenotype**
**Zoi Piperigkou[1, 2], Panagiotis Bouris[1], Maurizio Onisto[3], Marco Franci[4], Dimitris Kletsas[5], Achilleas D. Theocharis[1], Nikos K. Karamanos[1]**
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P108 **Extracellular matrix stiffness controls the breast circadian clock**
**Nan Yang[1,2], Jack Williams[1,2], Vanja Pekovic-Vaughan[1], Nicole Gossan[1], Alun Hughes[1], Julia Cheung[2], Pengbo Wang[2], Safia Olabi[2], Charles H Streuli[2]*, Qing-Jun Meng[1,2]***
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P109 **Advanced Glycation End products (AGEs) combined with in vitro UVA exposure lead to an aggravation of skin aging by creating an elastosis- like phenomenon**
**Pageon H., Zucchi H., Asselineau D.**
*L'Oréal, Research & Innovation, Aulnay sous bois, France*

P110 **Development of an in vitro assay system to investigate peritoneal cell mediated fibrin remodelling associated with post-operative adhesion formation**
**Patil A[1], Sherratt M.J[1], Moore A[2], Herrick S.E[1].**
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P111 **Mechanisms of damage to the arterial wall extracellular matrix protein fibronectin by myeloperoxidase-derived oxidants**
**Siriluck Vanichkitrungruang[1,2,3], Christine Y. Chuang[1,3], Georg Degendorfer[1,2], and Michael J. Davies[1,2,3]**
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ST43/P112 **Properties and functions of collagen XIII and other MACIT collagens**
**Härönen Heli[1], Heikkinen Anne[1], Zainul Zarin[1], Tu Hongmin[1], Sormunen Raija[2], Miinalainen Ilkka[2], Oikarainen Tuomo[1], Koch Manuel[3], Santoleri Sabrina[1], Pihlajaniemi Taina[1]**
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ST44/P113 **Receptor for hyaluronic acid- mediated motility (RHAMM) regulates HT1080 fibrosarcoma cell proliferation via a β-catenin/c-myc signaling axis**

**Kouvidi K[1], Berdiaki A[1], Tzardi M[1], Karousou E[2], Passi A[2], Nikitovic D[1], Tzanakakis GN[1]**

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ST45/P114 **The circadian clock gene Bmal1 is required for cartilage tissue homeostasis**

**Michal Dudek[1], Nicole Gossan[1], Nan Yang[1], Hee-Jeong Im[2], Jayalath PD Ruckshanthi[1], Hikari Yoshitane[4], Xin Li[2], Ding Jin[1], Ping Wang[1], Yoshitaka Fukada[4], Ray P. Boot-Handford*[1,3], Qing-Jun Meng*[1,3]**

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ST46/P115 **Isolated iduronic acids in chondroitin/dermatan sulfate are important for neural crest cell migration**

**Nadège Gouignard[1], Emil Tykesson[3], Antti Hassinen[2], Sakari Kellukumpu[2], Katarzyna Zielinska[3], Anders Malmström[3], Edgar Pera [1], Marco Maccarana[3]**

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ST47/P116 **Expression of factors responsible for extracellular matrix remodeling leading to epithelial to mesenchymal transition in *Helicobacter pylori* infection**

**Ioanna S. Sougleri, Konstantinos S. Papadakos, Androniki Voulgari-Kokota, Yiannis Karayiannis, Andreas F. Mentis and Dionyssios N. Sgouras**

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P117 **Effects of flavonoids on proteasome expression and activity in fibroblasts of various origin**

**Zoi Kordou, Maria Magiati, Maria-Elpida Christopoulou, and Alexios J. Aletras***

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P118 **N-acetylcysteine ameliorates the skeletal phenotype in a mouse model of Diastrophic Dysplasia**

**C. Paganini[1], L. Monti[1], R. Costantini[1], S. Lecci[1], M. Cohen-Solal[2], E. Hay[2], S. Villani[3], A. Superti-Furga[4], A. Forlino[1], A. Rossi[1]**

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P119 **The complement inhibitor CSMD1 acts a tumour suppressor for breast cancer**

**Chrysostomi Gialeli[1], Astrid Escudero-Esparza[1], Michael Bartoschek[2], Matthias Mörgelin[3], Petter Storm[4], Marcin Okroj[1], Sioned Owen[5], Karin Jirström[6], Akira Orimo[7], Wen G. Jiang[5], Kristian Pietras[2] and Anna M. Blom[1]**

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P120 **Targeting ER stress in collagen IV pathologies**

**Frances Jones[1], Lydia Murray[1], Karl Kadler[2], Tom Van Agtmael[1]**
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P121 **Biomarkers associated with Drosophila type IV collagen *col4a1* mutations as potential therapeutic targets in collagenopathy**

**András Attila Kiss[1], Nikoletta Popovics[1], Márton Kiss[1], Katalin Csiszár[2] and Mátyás Mink[1]**
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P122 **The effects of UVB radiation on cytokines, metalloproteinases and their endogenous inhibitor, and proteasome expression in human pterygium fibroblasts is mediated by macrophage migration inhibitory factor (MIF)**

**Maria-Elpida Christopoulou[1], Panagiota Mourantidi[1], Ioannis Trilivas[2], Eleftheria Giannopoulou[3], Nikolaos Pharmakakis[2], Alexios J. Aletras[1*]**
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P123 **Identification of new targets for the treatment of classical Osteogenesis Imperfecta using zebrafish models**

**Roberta Gioia[1], Francesca Tonelli[1], Marco Biggiogera[2], Sergey Leikin[3], Shannon Fisher[4], Ruggero Tenni[1], Antonio Rossi[1], Antonella Forlino[1]**
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P124 **Switch of mesenchymal into epithelial phenotype of breast cancer cells: Impact of anti-inflammatory drug dexamethasone**

**Heba Bassiony[1*], Eslam A. Elghonaimy[1*], Mohamed El-Shinawi[2], Sherif A. Ibrahim[1], Mona Mostafa Mohamed[1]**
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P125 **Structural characterization of Collagen VI von Willebrand factor type A domains and the functional consequences of mutations**

**Herimela Solomon-Degefa[1], Halina Mikolajek[2], Jörn Werner[2], Louise Bird[3], Ray Owens[3], Carsten Bönneman[4], Mats Paulsson[1], Raimund Wagener[1]**
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P126 **Dissecting the molecular basis of Fibrillin-LTBP interactions and their importance for TGF-β regulation**

**Ian B Robertson, Sacha A Jensen, Christina Redfield, and Penny A Handford**

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P127 **ERα knock-down severely affects the subcellular distribution of β-catenin in breast cancer cells. A possible implication of HSPGs**

**Th. Karalis, D.H. Vynios, N.K. Karamanos, S.S. Skandalis**

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P128 **Macrophages migration inhibitory factor (MIF) attenuates the suppressive effect of dexamethasone on IL-6 production by nasal polyps fibroblasts via modulation of proteasome expression and activity**

**Theodoros Kontozi[1], Theodoros Stathas[2], Stefanos Naxakis[2], Eleftheria Giannopoulou[3], and Alexios J. Aletras[1]**

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P129 **The Xbp1 arm of the unfolded protein response (UPR) has a pro-survival role in a chondrodysplasia triggered by mutant protein aggregation**

**KA Piróg[1], C Hartley[2], K Tian[2], LH Glimcher[3], JF Bateman[4], JM Schwarz[2], RP Boot-Handford[2], MD Briggs[1]**

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P130 **Short stature and altered BMP signalling in mice with a Gremlin-2 3′-UTR mutation**

**Richa Garva, Antony Adamson, and Karl E. Kadler**

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P131 **Effect of β-tryptase on the production of extracellular matrix components from human nasal polyps fibroblasts**

**Ioannis Voerakos[1], Panagiotis Bouris[1], Theodoros Stathas[2], Stefanos Naxakis[2], Eleftheria Giannopoulou[3], Alexios J. Aletras[1]**

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P132 **Effect of S-Allylmercapro-N-Acetylcysteine on Stromal Bone Marrow Cells and Bone Structure in Adult Mice**

**Reem Abu-Kheit[1], Yankel Gabet[2], Shlomo Kotev-Emeth[1], Naphtali Savion[1]**

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# Late Breaking Abstracts

## POSTER SESSION I

P133 **Determination of the collagen consensus sequence for COMP binding**
**Monika Gompert[1], Manuel Koch[2], Ulrich Baumann1 & Jan M. Gebauer[1#]**
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P134 **Inhibition of lysyl oxidase like 2 reduces collagen accumulation and collagen cross-links in CCl4-induced liver fibrosis**
**A Buson, L Cao, M Deodhar, A D Findlay, J S Foot, A Greco, J Moses, H C Schilter, C I Turner, T T Yow, W Zhou, W Jarolimek**
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## POSTER SESSION II

P135 **Authentication of collagen VI antibodies - Immunoblot analysis for specificity and sensitivity**
**Jamie Fitzgerald[1], Jamie Endicott[1] and Paul Holden[2]**
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P136 **The role of ERβ and EGFR in functional properties and the expression profiles of major ECM modulators in aggressive breast cancer cells**
**Kalliopi Zioutou, Zoi Piperigkou, Nikos K. Karamanos**
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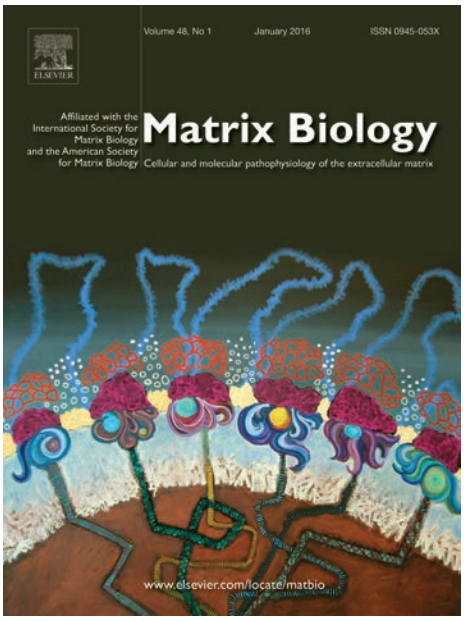


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