

## IBCA 2013 Posters

Tuesday, August 21<sup>st</sup> 2013

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### Cell Migration

- P1** F. Graf, P. Horn, C. Maercker, A. Ho and M. Boutros (Germany)  
Screening for Mediators of Bone Metastasis
- P2** E. Lajkó, P. Bányai, É. Szőke and L. Kőhidai (Hungary)  
Natural Cancer Therapeutics – The Effects of Anthraquinones Derived from Rubia Tinctorum L. on Melanoma Cell Lines
- P3** Y. Amoozadeh, F. Waheed, Q. Dan and K. Szaszi (Canada)  
Molecular Mechanisms Mediating TNF- $\alpha$ -Induced Barrier and Migration Changes in Tubular Epithelial Cells
- P4** M.I. Bellotti, F. Giana and F. Bonetto (Argentina)  
Wound-Healing Process on the Mammal Cells Monitored by Electric Cell-Substrate Impedance Sensing.
- P5** W. Gamal, S. Smith, I. Underwood and P. Bagnaninchi (United Kingdom)  
Microelectrode Array System for Electrically Driven Cell Migration Studies
- P6** B. Biri, O. Láng, E. Méhes, A. Czirók, L. Kőhidai and L. Nyitray (Hungary)  
Motility and Adhesion Assays Related to the Effect of Metastasis-Associated S100A4 Protein
- P7** J. Lang, R. Kuo, O. Lang, L. Kőhidai and E. Sivaniah (Hungary)  
Study of The interdependence of Cell Adhesion Migration and Mechanosensing Using a Complex, Innovative Approach
- P8** M. Rothbauer, V. Charwat, S.F. Tedde, O. Hayden, J.J. Bosch and P. Ertl (Austria)  
Monitoring dynamic interactions of tumor cells with tissue and immune cells in a lab-on-a-chip

## Nanoparticles

- P9** **C. Hupf and J. Wegener (Germany)**  
A Sequence of Impedance-Based Assays to Analyze the Cytocompatibility of Silica Particles
- P10** **M.A. Deli, S. Veszeka, L. Kiss, A. Bocsik, F.R. Walter, P. Sipos, P. Szabó-Révész (Hungary)**  
Measurement of Nanoparticle Toxicity on Different Barrier Cell Types with Colorimetric and Impedimetry Based Cellular Assays
- P11** **M.-M. Lemberger; Th. Hirsch, O. S. Wolfbeis and J. Wegener (Germany)**  
Monitoring the Influence of Carbon Dots on Animal Cells via Impedance Analysis
- P12** **F. Sambale, F. Stahl, D. Bahnemann and T. Scheper (Germany)**  
Real-Time Impedance Analysis of the Toxic Effect of Nanoparticles on Mammalian Cell Lines
- P13** **C. Caviglia, M. Carminati, A. Heiskanen, K. Zór, G. Ferrari, M. Sampietro, T.L. Andresen, J. Emnéus (Denmark)**  
Impedance Spectroscopy Studies of Poly(ethylenimine)s-Mediated Cytotoxicity During Gene Transfection.

## Advanced Data Analysis

- P14** **M.I. Bellotti, W. Bast and Fabian J. Bonetto (Argentina)**  
Measurement of a Single Cell in a Confluent Monolayer using a Microelectrode and the ECIS Technique.
- P15** **T.H. Tung and C.M. Lo (Taiwan)**  
Use of Discrete Wavelet Transform to Analyze Impedance Fluctuation Obtained from Cellular Micromotion
- P16** **YT. Lai, YC. Wu and CM. Lo (Taiwan)**  
Electrical Fluctuation Analysis of Cell Micromotion by Hilbert-Huang Transform
- P17** **M.I. Bellotti, W. Bast and F.J. Bonetto (Argentina)**  
Determination of the limit of validity of the Giaefer and Keese model for very small microelectrodes in ECIS.

## Toxicology and Miscellaneous

- P18** L. Kiss, L. Kürti, A. Bocsik, F.R. Walter, S. Veszelka, B. Ozsvári, L. Puskás, P. Szabó-Révész and M.A. Deli (Hungary)  
Toxicity of Surfactants on Cultured Human Cells:  
Comparison of Different Methods
- P19** S. Slezák, E. Lajkó, É. Pállinger, K.B. Bai, G. Mező, I. Gera and L. Kőhidai (Hungary)  
Monitoring of the Effect of Oligotuftsín Derivatives on the  
Adhesion of Crevicular Fluid Cells
- P20** K. Mércz, E. Lajkó, M. Manea, G. Mező, L. Kőhidai and É. Pállinger  
Cell Adhesion and Proliferation of BeWo Choriocarcinoma  
Cell Line Induced by GnRH-III Based Targeted Systems

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## Vascular Applications

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Angiogenic Effect of Human Pluripotent Stem Cell-derived Endothelial Cells
- P26** L. Polgar, P. Soos, E. Lajko, O. Lang, B. Merkely and L. Kohidai (Hungary)  
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- P27** R. Szulcek, J. van Bezu, J.J.W.A. van Loon and G.P. van Nieuw Amerongen (The Netherlands)  
Transient Intervals of Hyper-gravity Enhance the Endothelial Barrier by Improvement of Junctional Integrity
- P28** A. Dietrich, H. Kalwa, A. Sydykov, B. Fuchs, U. Storch, T. Gudermann, N. Weissmann (Germany)  
Loss of Barrier Function in Lung Endothelial Cells Induced by TRPC6 Activation During Lung Ischemia-Reperfusion-Induced Edema (LIRE)
- P29** A.E. Tóth, F.R. Walter, A. Bocsik, S. Veszelka, L. Kiss, L. Nagy, B. Ózsvári, L.G. Puskás, S. Dohgu, Y. Kataoka and M.A. Deli (Hungary)  
Carbonyl Stress in Human Brain Endothelial Cells and Potential Therapeutic Agents
- P30** F.R. Walter, L. Kiss, L. Kürti, S. Veszelka, A. Bocsik, B. Ózsvári, L. Puskás, P. Szabó-Révész and M.A. Deli (Hungary)  
Characterization of Cell Based Drug Delivery Models by Microelectric Sensing and Permeability Assays
- P31** A. Harazin, F.R. Walter, S. Veszelka, A.E. Tóth, Z. Rakonczay Jr., P. Hegyi, M.A. Deli (Hungary)  
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- P32** **A Nemeth, Cs. Bodor, S. Mirzahosseini, L. Kohidai and L. Rosivall (Hungary)**  
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- P33** **H. Bäcker, L. Polgár, P. Soós, E. Lajko, O. Lang, A. Weymann, G. Szabó, L. Köhidai (Germany)**  
Effect of heart scaffold ECM proteins on cell adhesion of cardiac myocytes - Model experiments of cell adhesion based loading of porcine heart scaffold
- P34** **A. Rathakrishnan, Y.Q. Tang, A.M. Khan, A. Durbin, D.J. Grab and S.D. Sekaran (Malaysia)**  
Microvascular Endothelial Cells Responses towards Dengue Virus Infection

## Signal Transduction

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- P37** **P. Babica, J. Novák and I. Sovadinová (Czech Rep.)**  
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- P38** **V. Charwat, M. Joksch, M. Purtscher, M. Rothbauer and P. Ertl (Austria)**  
Improving Impedance Cell Analysis: High Frequency Dielectric Spectroscopy in Combination with Multivariate Data Analysis and Complementary Assays
- P39** **S. Lukic, S. Michaelis and J. Wegener (Germany)**  
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## New Technologies

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**(Germany)**  
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**P41** Differential Adhesion of Single Human Cytotoxic T Cells
- F. Liu and I. Voiculescu** **(USA)**  
**P42** Integration of Impedance Spectroscopy Technique with Gravimetric Measurements for Cell Culture Monitoring
- X.T. Vu, J.K.Y. Law and S. Ingebrandt** **(Germany)**  
**P43** Electric Cell-Substrate Impedance Sensing with Silicon Nanowire Transistors Could Possibly Enable Ultrahigh Lateral Resolution
- J. Schächtele and J. Stein** **(Germany)**  
**P44** Towards Spatially Resolved Impedance Analysis of Adherent Cells
- L.E. Delle, J.K.Y. Law, M. Weil, X.T. Vu and S. Ingebrandt** **(Germany)**  
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- C. Götz, J. Schmidt, M. Stich, S. Trupp and J. Wegener** **(Germany)**  
**P46** PEDOT/PSS as Electrode Material for Impedance and QCM Analysis of Adherent Cell Monolayers
- A. Susloparova, X.T. Vu, J.K.Y. Law and S. Ingebrandt** **(Germany)**  
**P47** Impedance Spectroscopy with Organic Field-effect Transistors for the Analysis of Cell Adhesion
- F. Hempel, J.K.Y. Law and S. Ingebrandt** **(Germany)**  
**P48** Interfacing Neurons with Reduced Graphene Oxide Lines for ECIS
- F. Tolner, Z. Fekete, P. Fürjes** **(Hungary)**  
**P49** Electromagnetic model of cellular flow in a microfluidic system
- K. Hajek and J. Wegener** **(Germany)**  
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- P51** L. Čtveráčková, P. Kubincová, and I. Sovadinová (Czech Rep.)  
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- P52** D. Koppenhoefer, A. Susloparova, J.K.Y. Law, X.T. Vu, S. Ingebrandt (Germany)  
Neurodegeneration and neuroprotection - Analyzing the effects of oxidative stress on neurons using impedance measurements with field-effect transistors
- P53** F. Liu and I. Voiculescu (USA)  
Study of Long Term Cell Viability using Impedance Spectroscopy Technique
- P54** M. Purtscher, M. Rothbauer, A. Bailey and P. Ertl (Austria)  
Extended Infectivity Assay – Amplification and Detection of Retroviral Contaminations in a Lab-on-a-Chip
- P55** D. Sticker, M. Rothbauer, O. Bethge, H. D. Wanzenboeck and P. Ertl (Austria)  
Next generation cellular impedance spectroscopy?  
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