

EBTT Student's presentation programme:

Monday November 16th:

Chair: Lluís M. Mir

Electropermeabilization of mixed lipid bilayers (PC:PS) in the presence of calcium

Zachary A Levine, Matthew J. Ziegler, P. Thomas Vernier

Interaction between like-charged membrane surfaces mediated by positively and negatively charged nanoparticles of blood plasma - Experiments

Mojca Frank, Jasna Urbanija, Šárka Perutková, Vid Šuštar, Veronika Kralj-Iglič, Aleš Iglič, Blaž Rozman

Use of Giant Unilamellar Vesicles as a model to study electropermeabilization

Chloé Mauroy, Isabelle Rico-Lattes, Justin Teissié, Marie-Pierre Rols

Interaction between like-charged membranes surfaces mediated by positively and negatively charged nanoparticles of blood plasma - theory

Sarka Perutkova, Klemen Bohinc, Goran Bobojevic, Jasna Zelko, Mojca Frank, Stefano Maset, P.B. Sunil Kumar, Veronika Kralj-Iglic, Ales Iglic

Development of a CARS microscope for visualisation of molecular changes induced on cell's membrane by application of nanosecond Pulsed Electric Fields.

Aude Silve, Brigitte Tretout, Nelly Dorval, Lluís M. Mir

A numerical study of water-micelle system exposed to high E-field nano-pulses

Paolo Marracino, Francesca Apollonio, Andrea Amadei, Micaela Liberti, Massimiliano Aschi, Alfredo Di Nola, and Guglielmo D'Inzeo

Tuesday November 17th:

Chair: Justin Teissié

Modified Blumlein Pulse Forming Networks for Bioelectrical Application

Stefania Romeo, Maurizio Sarti, Maria Rosaria Scarfi, Luigi Zeni

Endoscopic Gene and Drug Delivery for Gastrointestinal Tissues and Tumours: A New Development

M.G. Bourke, M. Sadadcharam, P. Forde, M. de Kruijff, W. Byrne, L. Cogan, D. Soden, G.C. O'Sullivan

Dielectrophoresis as a method for separation of biological cells by their physical properties

Jaka Čemažar, Tadej Kotnik

Enhanced uptake of noncytotoxic superparamagnetic iron oxide nanoparticles in the presence of an external magnetic field in different cell lines *in vitro*

Sara Prijic, Janez Scancar, Andrej Znidarsic, Maja Cemazar, Gregor Sersa

A microdosimetric study on nanosecond pulsed electric field

Caterina Merla, Alessandra Paffi, Micaela Liberti, Francesca Apollonio, Federico Danei, Paolo Marracino, Philippe Leveque, Guglielmo d'Inzeo

Pulsed EM-Induced Membrane Heating in a Living Cell with Frequency-Dependent Membrane Capacitance.

Assunta De Vita, Rocco P. Croce, Vincenzo Pierro, Innocenzo M. Pinto

Thursday November 19th:

Chair: Gregor Serša

Electroporation potentiates cytotoxic effect of the anticancer ruthenium compound KP1339 *in vivo*

Rosana Hudej, Iztok Turel, Masa Kanduser, Janez Scancar, Simona Kranjc, Gregor Sersa, Damijan Miklavcic, Michael A. Jakupec, Bernhard K. Keppler, Maja Cemazar

Resealing Process of CHO Cells After Electroporation at Room Temperature in Isotonic and Hypotonic Buffers

Crt Zupancic, Marko Usaj, Damijan Miklavcic, Masa Kanduser

Evaluation of the efficiency of DNA electrotransfer *in vitro* using high voltage and low voltage pulses

Paulius Ruzgys, Karolina Čepurnienė, Rimantas Treinys and Saulius Šatkauskas

The Effect of High Frequency Electric Pulses on Tumor Blood Flow *in vivo*

Elham Raeisi, S.M.P. Firoozabadi, S.Hajizadeh, H.Rajabi, M.Z Hassan

Is the actin cytoskeleton involved in the *in vitro* gene delivery mediated by electric field?

Christelle Rosazza, Jean-Michel Escoffre, Andreas Zumbusch, Marie-Pierre Rols

PNA delivery by electroporation using a muscle model

Camilla Brolin, Pernille Hojman, Peter E. Nielsen, Julie Gehl

Mechanism of MD-2/Toll-like Receptor 4 Activation by Endotoxin

Nuša Resman, Jožica Vašl, Alja Oblak, Primož Pristovšek, Theresa L. Gioannini, Jerrold P. Weiss and Roman Jerala

Friday November 20th:

Chair: Véronique Prémat

The Effect of Electric Pulse Number in Electrochemotherapy by Low Voltage and High Frequency

Zeinab Shankayi, Elham Raeisi, Leila Towhidi, S.M.P. Firoozabadi

Safety and efficacy of intratumoural electrotransfer of plasmid AMEP in patients suffering from advanced or metastatic melanoma: an open phase 1 trial

Iben Spangaard, Poul Geertsen, Lluís M. Mir, Gregor Sersa, Pierre Attali, Julie

Bleomycin treatment of brain tumors: an evaluation

Mette Linnert, Julie Gehl

Treatment Planning for Electrochemotherapy Treatment of Deep-Lying Tumors

Bor Kos, Anže Zupanič, Tadej Kotnik, Marko Snoj, Maja Cemazar, Tjasa Pecnik, Gregor Sersa, Damijan Miklavcic

Comparison of electroporation and gene electrotransfer on plated cells and cells in a suspension for two cell lines

Igor Marjanovic, Mojca Pavlin, Masa Kanduser, Damijan Miklavcic

Electrochemotherapy: The Lisbon experience

Victor Farricha, Hugo Vasques, Sara Carvalhal, José Crespo Mendes de Almeida

Saturday November 21st:

Chair: Damijan Miklavčič

Electrodenaturation treatment of tumours using a one-probe two- electrodes device

Felipe Maglietti, Nahuel Olaiz, Cecilia Suárez, Fernando Molina, Damijan Miklavcic, Lluís Mir and Guillermo Marshall

Comparison of plate electrode and pin electrode for skin gene electrotransfer using numerical models

Faisal Mahmood

Irreversible Electroporation for Microbial Control of Drugs in Solution

Alex Golberg, Michael Belkin and Boris Rubinsky

Tumor Treatment Using Irreversible Electroporation with a Minimally Invasive Single Needle Electrode

Robert E. Neal II, Ravi Singh, Heather Hatcher, Suzy Torti, Rafael V. Davalos

Bubble radius dynamics induced by ultrasound

Jure Jelenc, Alenka Maček Lebar

Intracranial Non-Thermal Irreversible Electroporation: Electrical Conductivity Analysis

Paulo A. Garcia, John H. Rossmeisl, Jr., John Robertson, Rafael V. Davalos