

LIVRO DE RESUMOS



XLII Reunião Anual da Sociedade Portuguesa de Farmacologia

XXX Reunião de Farmacologia Clínica

XI Reunião de Toxicologia

Lisboa, Auditório do INFARMED, 1 – 3 Fevereiro 2012



PATROCINADORES



APOIO





XLII Reunião Anual da Sociedade Portuguesa de Farmacologia

XXX Reunião de Farmacologia Clínica

XI Reunião de Toxicologia

PROGRAMA

(INFARMED 1-3 FEVEREIRO)

QUARTA-FEIRA, 1 FEVEREIRO

14:00 – Abertura Secretariado

15:00 - 18:30

Workshop - Auditório do INFARMED

O ENSINO DA FARMACOLOGIA NAS UNIVERSIDADES PORTUGUESAS

15:00 - 16:25 - Ensino da Farmacologia Pós-Bolonha (Mestrados Integrados)

MEDICINA

Farmacologia

Farmacologia Clínica

CIÊNCIAS FARMACÊUTICAS

Farmacologia e Medicamento

MEDICINA VETERINÁRIA

Farmacologia e Saúde Pública

MEDICINA DENTÁRIA

Farmacologia e Biomateriais

DISCUSSÃO GERAL

Painel e audiência

16:25 – 16:45 - *Intervalo*

16:45 - 18:30 - *Novos Desafios no Ensino da Farmacologia*

ENSINO INTEGRADO EM ÁREAS DE DISCIPLINAS

Ciências Funcionais, Introdução à Patologia, Biopatologia e
Introdução à Terapêutica

PBL

INTERESSES ESTRATÉGICOS E NOVAS OPORTUNIDADES

Novos cursos (Bioquímica e Bioengenharia)

Programas Doutorais

DISCUSSÃO GERAL

Painel e audiência

18:30 – Cocktail de Boas Vindas

19:00 - Assembleia Geral da SPF

QUINTA-FEIRA, 2 FEVEREIRO

8:30 – Abertura Secretariado

9:00 – 10:30

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

SALA GARCIA D'HORTA

Chairs: H.Mota-Filipe, Cláudia Cavadas	Chairs: Bruno Sepodes, Isabel Vitória
ADENOSINE A2A RECEPTOR ABBROGATES LPS-INDUCED PROLIFERATION OF MICROGLIA THROUGH THE CONTROL OF BDNF SECRETION <u>Catarina Gomes</u> , Raquel Ferreira, Diana Rodrigues, Rodrigo Cunha	A BIO-GUIDED ASSAY REVEALS CYMBOPOGON CITRATUS AS SOURCE OF NEW ANTI-INFLAMMATORY DRUGS <u>Vera Francisco</u> , Gustavo Costa, Artur Figeirinha, Carmen Garcia-Rodriguez, Maria Celeste Lopes, Maria Teresa Cruz & Maria Teresa Batista
INDUCTION OF THE MITOCHONDRIAL PERMEABILITY TRANSITION BY DIMETHYLAMINOPYRIDINE DERIVATIVES OF LUPANE TRITERPENOIDS <u>Telma C. Bernardo</u> , Jon Holy, Dmitry Krasutsky, Oksana Kolomitsyna, Pavel Krasutsky, António M. Moreno , Paulo J. Oliveira	NEURONAL MITOCHONDRIAL METABOLISM AND DYNAMICS FOLLOWING SHORT VS. PROLONGED EXPOSURE TO EPIGENETIC MODULATORY DRUGS <u>Pedro Guedes-Dias</u> , Rafael Maia-Amaral, Jorge M. A. Oliveira
P2Y RECEPTOR MODULATION OF NMDA-EVOKED NORADRENALINE RELEASE IN RAT BRAIN CORTEX <u>Diana Pinho</u> , Renata Belo, Filipa Sardo, Clara Quintas, Jorge Gonçalves, Glória Queiroz	SITAGLIPTIN PREVENTS NEPHROPATHY EVOLUTION IN AN ANIMAL MODEL OF TYPE 2 DIABETES <u>Cristina Mega</u> , Edite Teixeira de Lemos, Helena Vala, Rosa Fernandes, Jorge Oliveira, Filipa Mascarenhas Melo, Rui Pinto, Frederico Teixeira, Flávio Reis
FINE-TUNING MODULATION OF HIGH-AFFINITY NEUROTRANSMITTER TRANSPORTERS BY PURINES IN THE HUMAN NEOCORTEX <u>Aurora Barros-Barbosa</u> , M. Graça Lobo, Paulo Correia-de-Sá, J. Miguel Cordeiro	ERYTHROPOIETIN: SETTING THE TONE IN HOMEOSTATIC PLASTICITY? <u>Raquel Baptista Dias</u> , Diogo M. Rombo, Jennifer McGarvey, Jeremy M. Henley, Ana M. Sebastião
ADENOSINE FACILITATES ITS OWN RELEASE IN THE RAT MYENTERIC PLEXUS THROUGH THE ACTIVATION OF A2A RECEPTORS COUPLED TO THE ADENYLATE CYCLASE / CYCLIC AMP PATHWAY <u>Patrícia Marques</u> , M. Duarte-Araújo, C. Vieira, I. Silva, M.T. Magalhães-Cardoso & Paulo Correia-de-Sá	STIMULATION OF ENDOTHELIAL PROGENITOR CELLS BY STATINS IN CHRONIC HEART FAILURE <u>Natália António</u> , Rosa Fernandes, Artur Paiva, Lino Gonçalves, Luís Providência, Carlos Fontes Ribeiro
LOW ADENOSINE LEVELS DERIVED FROM THE EXTRACELLULAR CATABOLISM OF RELEASED ATP CONTRIBUTE TO NEUROTRANSMISSION FAILURE IN MYASTHENIC MOTOR ENDPLATES <u>C.Costa</u> , D. Paramos, M.A. Timóteo, M.T. Magalhães-Cardoso, L.Oliveira, P.Correia-de-Sá	COMPENSATORY LONG-TERM POTENTIATION IN AGED RATS Júlia S. Pinho, Ruben Duque do Vale, Vânia L. Batalha, Ana Rita Costenla, Jorge Valadas, Antonina Pereira, Ana M. Sebastião, Luísa V. Lopes, Alexandre de Mendonça, <u>Maria José Diógenes</u>

10:30 – 11:00

Coffee-Break

11:00 – 11:30 Cerimónia Oficial da Abertura da XLII Reunião Anual da Sociedade Portuguesa de Farmacologia - Auditório

11:30 – 13:00

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

SALA GARCIA D’HORTA

Chairs: Emília Monteiro, Glória Queiroz	Chairs: Jorge Oliveira, Margarida Caramona
<p>EFFECT OF THE AMYLOID-B PEPTIDE IN GABA RELEASE FROM HIPPOCAMPAL SYNAPTOSOMES: MODULATION BY BDNF <u>SOFIA R. LÉRIAS</u>, SARA PARREIRA, SANDRA H. VAZ, MARIA JOSÉ DIÓGENES AND ANA MARIA SEBASTIÃO</p>	<p>EFFECTS OF HEXAVALENT CHROMIUM ON BONE GROWTH IN JUVENILES WISTAR RATS <u>ANA RAFAEL</u>; CARMEN ALPOIM; A. SILVÉRIO CABRITA; FERNANDO CAPELA E SILVA</p>
<p>HIGH FREQUENCY OF JC POLYOMAVIRUS IN HUMAN NORMAL COLORECTAL MUCOSA, HYPERPLASTIC POLYPS AND SPORADIC COLORECTAL ADENOMAS AND ADENOCARCINOMAS <u>TATIANA COELHO</u>, RITA GASPAR, MÁRIO RUI SILVA, MARIA MANUELA GRAZINA, FRANCISCO AMBRÓSIO, PEDRO FIGUEIREDO, PEDRO A. LAZO, CRISTINA MENDONÇA, LUÍS ALMEIDA</p>	<p>PARALLEL TIME-COURSE BETWEEN POSTNATAL INCREASE IN ADRENALINE FORMATION AND THE DEVELOPMENT OF B2-ADRENOCEPTOR-MEDIATED RELAXATION <u>P. MENDES</u>, M. MOREIRA-RODRIGUES, L. GRAÇA, M. PEREIRA, P. SERRÃO AND D. MOURA</p>
<p>OVEREXPRESSION OF ADENOSINE A2A RECEPTORS INDUCES DEPRESSIVE- LIKE BEHAVIORS IN RATS <u>PEDRO N. ALVES</u>, JORGE S. VALADAS, TATIANA SHMIDT, ANA MARIA SEBASTIÃO, JOAQUIM A. RIBEIRO, MICHAEL BADER, FREDERICO SIMÕES DO COUTO AND LUÍSA V. LOPES</p>	<p>DIARYLAMINES AS PROMISSORES COMPOUNDS PROTECTING FROM MITOCHONDRIAL PERMEABILITY TRANSITION PORE OPENING <u>RUTE LOUREIRO</u>, MARIA-JOÃO R.P. QUEIROZ AND ANTÓNIO J.M. MORENO</p>
<p>INHIBITION OF BUTYRATE UPTAKE BY THE PRIMARY BILE ACID CHENODEOXYCHOLIC ACID IN A NON-TUMORAL INTESTINAL EPITHELIAL CELL LINE (IEC-6 CELLS) <u>TELMO CATARINO</u>, PEDRO GONÇALVES, INÊS GREGÓRIO, FÁTIMA MARTEL</p>	<p>IN VIVO EVALUATION OF AGRIMONIA EUPATORIA L. ANALGESIC AND ANTIINFLAMMATORY ACTIVITIES <u>TELMO SANTOS</u>, JOÃO PINTO FERREIRA, GUSTAVO COSTA, MARGARIDA CARAMONA, TERESA BATISTA, ISABEL FIGUEIREDO, MARGARIDA CASTEL-BRANCO</p>
<p>METHAMPHETAMINE INCREASES TRANSCYTOSIS IN BRAIN MICROVASCULAR ENDOTHELIAL CELLS AND LYMPHOCYTE MIGRATION VIA ENDOTHELIAL NITRIC OXIDE SYNTHASE <u>TÂNIA MARTINS</u>, CLARE FUTTER, THOMAS BURGOYNE, NATALIE HUDSON, NUNO MILHAZES, FERNANDA BORGES, ANTÓNIO FRANCISCO AMBRÓSIO, ANA PAULA SILVA, JOHN GREENWOOD, PATRIC TUROWSKI</p>	<p>EVALUATION OF ANTI-INFLAMMATORY AND ANALGESIC ACTIVITIES OF UNCARIA TOMENTOSA (WILLD.) DC. PROANTHOCYANIDINS RICH FRACTION ON IN VIVO MODELS <u>JOÃO PINTO FERREIRA</u>, TELMO SANTOS, GUSTAVO COSTA, MARGARIDA CARAMONA, TERESA BATISTA, MARGARIDA CASTEL-BRANCO, ISABEL FIGUEIREDO</p>
<p>COMT GENETIC POLIMORPHISM MAY INFLUENCE PAIN, REQUIRING HIGHER OPIOID DOSES IN CANCER PATIENTS <u>ANA OLIVEIRA</u>, RICARDO JORGE DINIS-OLIVEIRA, AUGUSTO NOGUEIRA, ANDREIA AZEVEDO, FERRAZ GONÇALVES, PAULA SILVA, FÉLIX CARVALHO, RUI MEDEIROS</p>	<p>ANGER EXPRESSION AMONG PATIENTS UNDER ANTIHYPERTENSIVE DRUG THERAPY <u>ESPERANÇA SILVA</u>, ZILDA MENDES, EMANUEL PONCIANO, MARGARIDA CARAMONA</p>

13:00 – 14:30 Almoço - INFARMED

14:30 – 16:30

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

Chairs: P. Correia de Sá, Frederico Pereira

N-TERMINAL VALINE ADDUCT FROM THE ANTI-HIV DRUG ABACAVIR IN RAT HEMOGLOBIN AS EVIDENCE OF BIOACTIVATION TO A REACTIVE ALDEHYDE IN VIVO

NÁDIA GRILO, SOFIA A. PEREIRA, CATARINA CHARNEIRA, EMÍLIA C. MONTEIRO, M. MATILDE MARQUES, ALEXANDRA M. M. ANTUNES

PRESENCE OF DNA SEQUENCES OF JC POLYOMAVIRUS IN ABERRANT CRYPTS OF HUMAN COLORECTAL MUCOSA.

LILIANA CURADO, RITA GASPAR, TATIANA COELHO, MÁRIO SILVA, MANUELA GRAZINA, FRANCISCO AMBRÓSIO, PEDRO FIGUEIREDO, MARIA GRAÇA VALE, LUÍS ALMEIDA

EPILEPTIFORM ACTIVITY MODIFIES GLYCINERGIC TRANSMISSION MARKERS IN COMBINED HIPPOCAMPAL-ENTHORINAL CORTEX SLICES

CATARINA LUÍS, DIOGO M ROMBO, JOAQUIM A RIBEIRO, ANA M SEBASTIÃO AND CLÁUDIA A VALENTE

QUERCETIN AND EPIGALLOCATECHIN GALLATE INHIBIT GLUCOSE UPTAKE BY BREAST CANCER CELLS INDEPENDENTLY OF ESTROGEN SIGNALING

LILIANA MOREIRA, ISABEL ARAÚJO, TITO COSTA, ANA CORREIA-BRANCO, ANA FARIA, FÁTIMA MARTEL AND ELISA KEATING

DOES STRAIN INFLUENCE PAIN-PERCEPTION PROFILES IN STREPTOZOTOCIN-INDUCED DIABETIC NEUROPATHY RAT MODEL?

LILIANA S. CARVALHO, RAQUEL M. SOUSA, DANIELA PATINHA, DORA PINHO, ISAUARA TAVARES, ANTÓNIO ALBINO-TEIXEIRA

INSULIN TRIGGERS CAROTID BODY ACTIVATION

MARIA J. RIBEIRO, C.GONZALEZ, M. P. GUARINO, E. C. MONTEIRO AND S. V. CONDE

GABA TRANSPORTER 3 (GAT-3) ACTIVITY INFLUENCES PHASIC GABAERGIC TRANSMISSION IN THE HIPPOCAMPUS

SOFIA CRISTÓVÃO-FERREIRA, RAQUEL B. DIAS, ANA M SEBASTIÃO

CHITOOIGOSACCHARIDES - BIOACTIVE PROPERTIES WITH PHARMACOLOGICAL POTENTIAL

JOÃO FERNANDES, JOSÉ SERENO, PATRICIA GARRIDO, HENRIQUE NASCIMENTO, MANUELA PINTADO, FLÁVIO REIS, ALICE SANTOS-SILVA

SALA GARCIA D'HORTA

Chairs: C. Fontes Ribeiro; P. Soares da Silva

PHARMACOKINETIC-PHARMACODYNAMIC MODEL FOR DOSIFICATION OF CARBOPLATIN-GEMCITABINE SCHEME IN ELDERLY ADVANCED NON-SMALL CELL LUNG CANCER PATIENTS – ANALYTICAL PHASE

HUGO VIDAL, HELENA OLIVEIRA, JOAQUIM MONTEIRO, JOSÉ DAS NEVES, CARMEN DINIZ, JORGE GONÇALVES, BRUNO SARMENTO, PAULA FRESCO

ENDOXIFEN IS A LESS TOXIC ALTERNATIVE TO TAMOXIFEN

MARIANA PC RIBEIRO, FILOMENA SG SILVA, ARMANDA E SANTOS, JOSÉ BA CUSTÓDIO

CARDIAC SIK NETWORK IN HYPERTENSION AND AGEING

MARIA JOÃO PINHO, ALEJANDRO M. BERTORELLO, PATRICIO SOARES-DA-SILVA.

PHENOTYPE AND ANTIHYPERTENSIVE MEDICATION PROFILE IN OBSTRUCTIVE SLEEP APNEA PATIENTS: A PRELIMINARY STUDY.

LUCÍLIA N DIOGO, PAULA PINTO, CRISTINA BARBARA, EMÍLIA C MONTEIRO AND ANA LUÍSA PAPOILA

PRODUCING GUIDELINES BY ADAPTING INDEPENDENT MATERIALS AIMED AT IMPROVED RATIONAL PRESCRIBING

PEDRO CAETANO, DANIEL PINTO, BRUNO HELENO, EMÍLIA MONTEIRO, ISABEL SANTOS

HDL QUALITY AND PARAOXONASE 1 ACTIVITY AS PUTATIVE BETTER MARKERS OF DYSLIPIDAEMIA AND CARDIOVASCULAR RISK IN TYPE 2 DIABETES PATIENTS

FILIPA MASCARENHAS MELO, EDITE TEIXEIRA-LEMONS, JOSÉ SERENO, RUI PINTO, DANIELA MARADO, FILIPE PALAVRA, FREDERICO TEIXEIRA, FLÁVIO REIS

GESTATIONAL DIABETES REDUCES PLACENTAL UPTAKE OF LONG-CHAIN POLYUNSATURATED FATTY ACIDS AND INTERFERES WITH TROPHOBLAST DEVELOPMENT

JOÃO R. ARAÚJO, ANA CORREIA-BRANCO, CARLA RAMALHO, ELISA KEATING AND FÁTIMA MARTEL

LIPOPROTEIN (A) AND ADIPONECTIN IN HEMODIALYS PATIENTS

SANDRA RIBEIRO, MARIA DO SAMEIRO FARIA, GIL SILVA, HENRIQUE NASCIMENTO, PETRONILA ROCHA-PEREIRA, VASCO MIRANDA, FLÁVIO REIS, DENISA MENDONÇA, ALEXANDRE QUINTANILHA, ELÍSIO COSTA, LUÍS BELO, ALICE SANTOS-SILVA

16:30 – 17:00 Coffee-Break

17:00 – 18:30

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

SALA GARCIA D'HORTA

Chairs: Fernando Remião, Rodrigo Cunha	Chairs: Edite Lemos, Paula Fresco
CANCER STEM CELLS AND DRUG RESISTANCE IN OSTEOSARCOMA <u>VITOR B. OLIVEIRA</u> , SARA I. NEVES, CLÁUDIA GONÇALVES, ANÁLIA DO CARMO, A.PAIVA, CÉLIA. M. GOMES	THE ROLE OF GLIPTINS ON ADIPOGENESIS AND LIPOLYSIS <u>VERA CORTEZ</u> , MARTA ESTRADA, ANA PATRÍCIA MARQUES, CLÁUDIA CAVADAS & JOANA ROSMANINHO-SALGADO
STRIATAL RAGE DOWN-REGULATION PRIOR TO DOPAMINERGIC DENERVATION IN A MPTP MOUSE MODEL OF PARKINSON'S DISEASE <u>SOFIA D. VIANA</u> , ANDRÉA M. SILVA, CAMILA C. PORTUGAL, RENATO SOCODATO, SYED F. ALI, CARLOS FONTES RIBEIRO AND FREDERICO C. PEREIRA	HYDROGEN PEROXIDE REGULATES RENAL PRODUCTION OF RENIN AND ANGIOTENSINOGEN IN ANGIOTENSIN II-HYPERTENSIVE RATS <u>TERESA SOUSA</u> , JOANA AFONSO, MARIA JOÃO VALENTE, JORGE CARVALHO, MARIA PAULA SERRÃO, MANUELA MORATO, DANIELA PATINHA, SÓNIA FRAGA, FÉLIX CARVALHO, ANTÓNIO ALBINO-TEIXEIRA
ENDOGENOUS PROSTANOIDS MEDIATE P2 PURINOCEPTOR-INDUCED CONTRACTIONS OF THE HUMAN CORPUS CAVERNOSUM <u>MIGUEL FARIA</u> , J.-M. LAFUENTE-DE-CARVALHO & P. CORREIA-DE SÁ	IDENTIFICATION OF A STABLE BLOOD BIOMARKER OF NEVIRAPINE BIOACTIVATION IN HIV-INFECTED PATIENTS <u>ANA GODINHO</u> , ALEXANDRA M. ANTUNES, UMBELINA CAIXAS, ALINE MARINHO, M. MATILDE MARQUES, CONCEIÇÃO OLIVEIRA, TERESA BRANCO, EMÍLIA C. MONTEIRO, SOFIA A. PEREIRA
IMPAIRMENT OF ECTO-NTPDASES ACTIVITY LEADING TO ATP ACCUMULATION AND DECREASED FORMATION OF ADENOSINE CONTRIBUTES TO OVERACTIVITY OF THE HUMAN BLADDER <u>I. SILVA</u> , J. CORREIA, F. FERREIRINHA, T. MAGALHÃES-CARDOSO, M. SILVA-RAMOS, J. SÉVIGNY & P. CORREIA-DE-SÁ	GLUCOSE UPTAKE IN HUMAN BLOOD-BRAIN BARRIER: HORMONAL AND DIET MODULATION <u>ANA FARIA</u> , MANUELA MEIRELES, FÁTIMA MARTEL, CELESTINO SANTOS-BUELGA, SUSANA GONZALEZ-MANZANO, MONTSERRAT DUEÑAS, NUNO MATEUS, CONCEIÇÃO CALHAU
ADENOSINE RECEPTORS MODULATE CALCIUM SIGNALLING IN RAT CORTICAL PRIMARY ASTROCYTES ANDREIA CRUZ-SILVA, <u>SANDRA H. VAZ</u> , JOAQUIM P. JACOB AND ANA M. SEBASTIÃO	BLEEDING SAFETY PROFILE OF APIXABAN AND RIVAROXABAN AFTER HIP AND KNEE ARTHROPLASTY: A META – ANALYSIS <u>CARLOS ALVES</u> , ANA FILIPA MACEDO, FRANCISCO BATEL MARQUES
PROTECTIVE EFFECT OF TUMOR NECROSIS FACTOR-ALPHA AND INTERLEUKIN-6 AGAINST METHAMPHETAMINE-INDUCED MICROGLIAL CELL DEATH <u>VANESSA COELHO-SANTOS</u> , JOANA GONÇALVES, CARLOS FONTES-RIBEIRO, ANA PAULA SILVA	LEPTIN REDUCES FOLIC ACID UPTAKE BY BEWO CELLS THROUGH JAK2/STAT3 SIGNALING <u>ANA CORREIA-BRANCO</u> , JOÃO R ARAÚJO, FÁTIMA MARTEL AND ELISA KEATING

20:00

Jantar da SPF – MUSEU FUNDAÇÃO ORIENTE

SEXTA-FEIRA, 3 FEVEREIRO

8:30 – 11:00

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

Chairs: Alexandre Ribeiro, Conceição Calhau

EVALUATION OF REDOX DYSFUNCTION IN THE SPINAL CORD OF RATS AT EARLY STAGES OF PERIPHERAL NEUROPATHIC PAIN

RAQUEL M. SOUSA, LILIANA S. CARVALHO, MARINA MORAIS, DORA PINHO, ISAURA TAVARES, ANTÓNIO ALBINO-TEIXEIRA

UNRAVELING THE MECHANISMS BEHIND THE EFFECT OF THE ADENOSINE A2A RECEPTOR UPON AXONAL ELONGATION

FILIPA F. RIBEIRO, RUI SILVA, ADELAIDE FERNANDES, DORA BRITES, JOAQUIM A. RIBEIRO AND ANA M. SEBASTIÃO

CHRONIC BLOCKADE OF ADENOSINE A2A RECEPTORS PREVENTS BDNF EFFECT ON HIPPOCAMPAL LTP

JERÓNIMO-SANTOS A, BATALHA VL, MULLER C, HOCKEMEYER J, SEBASTIÃO AM, LOPES LV AND DIÓGENES MJ

ADENOSINE A2A RECEPTORS MODULATE GLUCOCORTICOID RECEPTOR (GR) TRANSCRIPTIONAL ACTIVITY: IMPLICATIONS FOR STRESS RESPONSE.

VÂNIA L. BATALHA, MALIKA HAMDANE, ANA M. SEBASTIÃO, LUC BUÉE, DAVID BLUM, LUÍSA V. LOPES

THE SHORT-CHAIN FATTY ACID BUTYRATE IS A SUBSTRATE OF THE ABC TRANSPORTER BREAST CANCER RESISTANCE PROTEIN (ABCG2; BCRP)

PEDRO GONÇALVES, INÊS GREGÓRIO, FÁTIMA MARTEL

ANGIOTENSIN II AND ADENOSINE SODIUM HANDLING IN AN EXPERIMENTAL MODEL OF DIABETIC NEPHROPATHY

DANIELA PATINHA, ANGÉLICA FASCHING, DORA PINHO, ANTÓNIO ALBINO-TEIXEIRA, MANUELA MORATO, AND FREDRIK PALM

HISTOLOGICAL AND ENZYMATIC CHANGES IN THE CEREBRAL CORTEX OF RATS AFTER HYPOXIC-ISCHEMIC INJURY

PIMENTEL VC; GOMES JL; SCHETINGER MR; DA LUZ SCA; MORETTO MB.

SALA GARCIA D'HORTA

Chairs: M. Lourdes Bastos, F. Batel Marques

IMPROVEMENT OF GENETIC STABILITY IN LYMPHOCYTES FROM FANCONI ANEMIA PATIENTS THROUGH THE ADDITIVE EFFECT OF α -LIPOIC ACID AND N-ACETYLCYSTEINE

FILIPA PONTE, ROSA SOUSA, FÉLIX CARVALHO, AND BEATRIZ PORTO

KINETICS OF A RECOMBINANT FORM OF HUMAN MEMBRANE-BOUND CATECHOL-O-METHYLTRANSFERASE

FILIPA SOUSA, MARIA JOÃO BONIFÁCIO, AUGUSTO Q. PEDRO, LUÍS PASSARINHA, LYNDON WRIGHT, PATRÍCIO SOARES-DA-SILVA

SUPERPARAMAGNETIC IRON OXIDE NANOPARTICLES (SPIONPS) EFFECTS ON HUMAN NEURONAL CELLS

RITA AZEVEDO, SÓNIA FRAGA, ARTURO LOPEZ-QUINTELA, JOSÉ RIVAS, PAULO FREITAS, MARIA DE LOURDES BASTOS, FÉLIX CARVALHO

IN VITRO EVALUATION OF INTESTINAL PERMEABILITY AND P-GLYCOPROTEIN EFFLUX OF CARBAMAZEPINE AND DERIVATIVES

ANA FORTUNA, GILBERTO ALVES, PATRÍCIO SOARES-DA-SILVA, AMÍLCAR FALCÃO

CYTOTOXICITY, GENOTOXICITY AND UPTAKE OF FUNCTIONALIZED GOLD NANOPARTICLES IN THE HUMAN LIVER HEPG2 CELLS

SÓNIA FRAGA, HELENA FARIA, MARIA ELISA SOARES, JOSÉ ALBERTO DUARTE, LEONOR SOARES, SÍLVIA MAIA, PAULA GOMES, EULÁLIA PEREIRA, CRISTIANA COSTA-PEREIRA, JOÃO PAULO TEIXEIRA, HELENA CARMO, MARIA LOURDES BASTOS

A COMPARATIVE STUDY OF EARLY AND LATE TOXIC EFFECTS OF MITOXANTRONE IN RATS

ROSSATO LG, COSTA VM, DALLEGRAVE E, BASTOS ML, DINIS-OLIVEIRA R, DUARTE JA, PALMEIRA C, REMIÃO F

THE EFFECT OF TERT-BUTYLHYDROPEROXIDE-INDUCED OXIDATIVE STRESS UPON THE UPTAKE OF FOLIC ACID BY CACO-2 CELLS

MAFALDA COUTO, PEDRO GONÇALVES, TELMO CATARINO, FÁTIMA MARTEL

<p>MODULATION OF P-GP EXPRESSION AND ACTIVITY BY NOVEL RIFAMPICIN DERIVATIVE, DIBENZRIF, IN RBE4 CELLS. <u>VÂNIA VILAS-BOAS</u>, RENATA SILVA, DANIEL JOSÉ BARBOSA, MARLENE LÚCIO, SALETTE REIS AND FERNANDO REMIÃO</p>	<p>FUNCTIONAL GLYCINE TRANSPORTERS, GLYT1 AND GLYT2, ARE EXPRESSED IN RAT CORTICAL ASTROCYTES <u>RITA I AROEIRA</u>, JOAQUIM A RIBEIRO, ANA M SEBASTIÃO AND CLÁUDIA A VALENTE</p>
<p>THE EFFECT OF THIAZOLIDINEDIONES ON THE SYMPATHETIC STIMULATION CAUSED BY ANGIOTENSIN II IN THE LEFT VENTRICLE OF THE RAT <u>HÉLDER PINHEIRO</u>, FILIPA SILVA, JOHANNES JÄGER, BEATE POSCH, IOLANDA FERREIRA, LUCIANO PEREIRA, RICARDO BASTOS, DANIEL MOURA</p>	<p>HYPOXIA INDUCES LIPID ACCUMULATION AND ADIPOCYTE DYSFUNCTION <u>JOANA ROSMANINHO-SALGADO</u>, ANA PATRÍCIA MARQUES, MARTA ESTRADA, VERA CORTEZ, CLÁUDIA CAVADAS</p>
<p>(R)-(+)-METHANANDAMIDE STIMULATES NEUROGENESIS IN NEURAL STEM CELL CULTURES FROM THE SUBVENTRICULAR ZONE <u>SARA XAPELLI</u>, LAURA SARDÀ, LILIANA BERNARDINO, TIAGO SANTOS, CLARISSA SCHITINE, FABIENNE AGASSE, JOÃO O. MALVA</p>	<p>SIROLIMUS AMELIORATES CYCLOSPORIN-INDUCED NEPHROPATHY IN A RAT MODEL <u>JOSÉ SERENO</u>, ANA M. ROMÃO, MARGARIDA TEIXEIRA, PAULO R. SANTOS, BELMIRO PARADA, PATRÍCIA GARRIDO, CRISTINA MEGA, HELENA VALA, EDITE TEIXEIRA LEMOS, FREDERICO TEIXEIRA, FLÁVIO REIS</p>

11:00 – 11:30 Coffee-Break

11:30 – 13:00 Conferência – Auditório

**Convidado SPF – Professor Christoph Thiemermann,
Centre Lead for Translational Medicine & Therapeutics,
William Harvey Research Institute.**

'Novel therapeutic strategies for ischaemia-reperfusion injury and shock'.

13:00 – 14:30 Almoço - INFARMED

14:30 – 16:30

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

SALA GARCIA D'HORTA

Chairs: Ana Sebastião, Silvia Conde	Chairs: Félix Carvalho, Fátima Martel
<p>ACTIVATION OF P2X7 RECEPTORS FAVOURS MEMBRANE CELL BLEBBING, EARLY OSTEOGENIC DIFFERENTIATION AND MINERALIZATION OF BONE MARROW STROMAL CELLS FROM POSTMENOPAUSAL WOMEN</p> <p><u>J.B. NORONHA-MATOS</u>, A. SÁ-E-SOUSA, J. COIMBRA, S. GOMES, R. ROCHA, J. MARINHAS, R. FREITAS, J. MORAIS-NEVES, M.A. COSTA & P. CORREIA-DE-SÁ</p>	<p>METHAMPHETAMINE DECREASES SELF-RENEWAL AND DELAYS CELL CYCLE IN DENTATE GYRUS NEUROSPHERES</p> <p><u>SOFIA BAPTISTA</u>, CARLOS FONTES RIBEIRO, FABIENNE AGASSE, ANA PAULA SILVA</p>
<p>DISTRIBUTION AND FUNCTION OF NEUROPEPTIDE Y RECEPTORS IN RAT RETINAL NEURAL CELLS</p> <p><u>ANA SANTOS-CARVALHO</u>, ANA RITA ÁLVARO, ANTÓNIO F. AMBRÓSIO, CLÁUDIA CAVADAS</p>	<p>IN VITRO EVALUATION OF HEPATOTOXICITY OF PIPERAZINE DESIGNER DRUGS</p> <p><u>MARCELO DUTRA ARBO</u>, MARIA DE LOURDES BASTOS, HELENA CARMO</p>
<p>HISTAMINE H1 RECEPTORS ACTIVATION CAUSES ATP RELEASE AND P2 PURINOCEPTOR-MEDIATED [CA2+]I OSCILLATIONS IN HUMAN FIBROBLASTS OF THE SUBCUTANEOUS TISSUE</p> <p><u>ANA RITA PINHEIRO</u>, D. PARAMOS, M. CERTAL, M.A. COSTA & P. CORREIA-DE-SÁ</p>	<p>IN VIVO MODELLING OF MITOCHONDRIAL DYSFUNCTION AND TESTING OF UBIQUINONE ANALOGUES IN ZEBRAFISH</p> <p><u>BRÍGIDA R. PINHO</u>, ANABELA FONSECA-SILVA, MIGUEL M. SANTOS, PATRÍCIA VALENTÃO, PAULA B.ANDRADO, JORGE M. A. OLIVEIRA</p>
<p>CHRONOSELECTIVITY OF ADENOSINE A1 RECEPTOR IN THE SPONTANEOUSLY BEATING RAT ATRIA: INTERPLAY WITH ADENOSINE A2A AND B-ADRENOCEPTORS</p> <p><u>B. BRAGANÇA</u>, N. OLIVEIRA-MONTEIRO, S. NOGUEIRA-MARQUES, P. CARVALHO, A.P. FONTES-SOUSA & P. CORREIA-DE-SÁ</p>	<p>META-ANALYSIS AS A PHARMACOVIGILANCE TOOL: EXPERIMENTAL AND OBSERVATIONAL STUDIES AS DATA SOURCES</p> <p><u>FRANCISCO BATEL MARQUES</u>, CARLOS ALVES, ANA FILIPA MACEDO</p>
<p>ATP RELEASE AND ACTIVATION OF ADP-SENSITIVE P2Y1 AND P2Y13 RECEPTORS AMPLIFY BRADYKININ B2 RECEPTOR-MEDIATED [CA2+]I SIGNALS IN THE RAT SUBCUTANEOUS FIBROBLASTS</p> <p><u>MARIANA CERTAL</u>, A.R. PINHEIRO, D. PARAMOS, C. REIS, M.A. COSTA & P. CORREIA-DE-SÁ</p>	<p>A COST-EFFECTIVENESS STUDY OF PLERIXAFOR (MOZOBIL®) IN AUTOLOGOUS STEM CELL TRANSPLANTATION IN MULTIPLE MYELOMA AND NON-HODGKIN'S LYMPHOMA</p> <p><u>FRANCISCO BATEL MARQUES</u>, OSCAR LOURENÇO, JOAQUIM MARQUES, ISABEL FIRMINO</p>
<p>FLUOXETINE PROMOTES THE PROLIFERATION OF HYPOTHALAMIC NEUROPROGENITOR CELLS AND MODIFIES THE EXPRESSION OF NEUROPEPTIDES THAT REGULATE APPETITE</p> <p><u>LÍGIA SOUSA-FERREIRA</u>, C. AVELEIRA, A R. ÁLVARO, L. PEREIRA DE ALMEIDA, C. CAVADAS</p>	<p>ADVERSE DRUG REACTION SPONTANEOUS REPORTING: RESULTS OF TEN YEARS OF ACTIVITY OF THE REGIONAL PHARMACOVIGILANCE UNIT OF CENTRAL PORTUGAL AND ITS CONTRIBUTION FOR DRUG SAFETY KNOWLEDGE</p> <p><u>DIOGO MENDES</u>, CARLOS ALVES, CARLOS FONTES RIBEIRO FRANCISCO BATEL MARQUES</p>
<p>DEVELOPMENT OF A NEW FAMILY OF FAAH INHIBITORS</p> <p><u>MARIA JOÃO BONIFÁCIO</u>, LEONEL TORRÃO, LYNDON WRIGHT, LÁSZLÓ KISS, PATRÍCIO SOARES DA SILVA</p>	<p>COMPARISON OF DOSE VARIABILITY CALCULATED BY TRADITIONAL METHOD WITH THE VARIABILITY OF PROPOFOL PLASMATIC CONCENTRATIONS IN RABBITS</p> <p><u>SÓNIA CAMPOS</u>, JOAQUIM MONTEIRO, AURA SILVA, PAULA GUEDES DE PINHO, PAULA FRESCO, LUÍS ANTUNES</p>
<p>ROLE OF A3 ADENOSINE RECEPTOR ON MALIGNANT MELANOMA CELLS</p> <p><u>ANA SOARES</u>, CARMEN DINIZ, PAULA FRESCO</p>	<p>INTERFERENCE OF FUCUS VESICULOSUS EXTRACT ON THE SYSTEMIC EXPOSURE OF AMIODARONE IN RATS</p> <p><u>MÁRCIO RODRIGUES</u>, GILBERTO ALVES, JOÃO ABRANTES, CATARINA CANDEIAS, AMÍLCAR FALCÃO</p>

16:30 – 17:00 Coffee-Break

17:00 – 19:30

Comunicações Orais (SESSÕES PARALELAS)

AUDITÓRIO

SALA GARCIA D'HORTA

Chairs: Daniel Moura, Amílcar Falcão	Chairs: Rui Pinto, Flávio Reis
NEUROPEPTIDE Y AS A CALORIC RESTRICTED MIMETIC <u>CÉLIA AVELEIRA</u> , MARIANA BOTELHO, JORGE PASCOAL, LÍGIA SOUSA-FERREIRA, LUÍS PEREIRA DE ALMEIDA, CLÁUDIA CAVADAS	MARKERS OF EARLIER CARDIOVASCULAR RISK IN MULTIPLE SCLEROSIS PATIENTS AND PUTATIVE CORRELATION WITH CLINICAL STAGING <u>FILIFE PALAVRA</u> , DANIELA MARADO, FILIPA MASCARENHAS-MELO, EDITE TEIXEIRA-LEMONS, JOSÉ SERENO, CARLA CECÍLIA NUNES, GRILO GONÇALVES, FREDERICO TEIXEIRA, FLÁVIO REIS
CHARACTERIZATION AND DIFFERENTIATION OF PROGENITOR CELLS FROM NORMAL ADULT HUMAN ADRENAL MEDULLA <u>MAGDA SANTANA</u> , KUEI-FUNG CHUNG, WALDEMAR KANZCKOWSKI, JOANA ROSMANINHO-SALGADO, VLADIMIR VUKICEVIC, VERA CORTEZ, CARLOS A. BASTOS, ALFREDO MOTA, MONIKA EHRHART-BORNSTEIN, CLÁUDIA CAVADAS	CHRONIC CAFFEINE INTAKE REVERSES AGE-INDUCED INSULIN RESISTANCE IN THE RAT <u>JOANA F. SACRAMENTO</u> , MARIA J. RIBEIRO, MARIA P. GUARINO, EMÍLIA C. MONTEIRO AND SÍLVIA V. CONDE
THE ROLE OF NEUROPEPTIDE Y ON AUTOPHAGY IN HYPOTHALAMUS <u>MARIANA BOTELHO</u> , CÉLIA AVELEIRA, JORGE PASCOAL, LÍGIA SOUSA-FERREIRA, CLÉVIO NÓBREGA, ANA RITA ÁLVARO, LUÍS PEREIRA DE ALMEIDA, CLÁUDIA CAVADAS	EFFECT OF CHRONIC CAFFEINE ADMINISTRATION ON PLASMA CATECHOLAMINES AND ON SKELETAL MUSCLE EXPRESSION OF GLUT-4 TRANSPORTERS AND AMPK IN DIET-INDUCED INSULIN RESISTANCE RATS <u>DUARTE D.ANTUNES</u> , JOANA F. SACRAMENTO, MARIA J. RIBEIRO, MARIA P. GUARINO, CONSTANCIO GONZALEZ, AND SILVIA V. CONDE
BICARBONATE-SENSITIVE SOLUBLE AND TRANSMEMBRANE ADENYL CYCLASES IN PERIPHERAL AND CENTRAL CO₂ CHEMORECEPTORS <u>ANA RITA NUNES</u> , VEDANGI SAMPLE, EMÍLIA MONTEIRO, ESTELLE GAUDA, JIN ZHANG	INHIBITION OF IL-1B INDUCED PRO-INFLAMMATORY AND CATABOLIC SIGNALING PATHWAYS IN HUMAN CHONDROCYTES BY THE ESSENTIAL OIL OF ERYNGIUM DURIAEI SUBSP. JURESIANUM <u>ANA T. RUFINO</u> , CARLOS CAVALEIRO, FERNANDO JUDAS, LÍGIA SALGUEIRO, CELESTE LOPES, ALEXANDRINA F. MENDES
ENHANCEMENT OF NEUROMUSCULAR TRANSMISSION IN THE SOD1G93A, A MODEL OF AMYOTROPHIC LATERAL SCLEROSIS, IN THE PRE-SYMPTOMATIC PHASE <u>MARIANA ROCHA</u> , PAULA POUSINHA, ALEXANDRA MARÇAL, J. ALEXANDRE RIBEIRO	EFFECTS OF ESILICARBAZEPINE ACETATE, ESILICARBAZEPINE, CARBAMAZEPINE AND OXCARBAZEPINE IN THE MES TEST AND IN THE 6-HZ PSYCHOMOTOR SEIZURE MODEL IN THE MOUSE <u>NUNO PIRES</u> , NUNO PALMA, LYNDON WRIGHT, PATRÍCIO SOARES-DA-SILVA
PHARMACOKINETIC MODEL OF PROPOFOL IN PIGS – PRELIMINARY RESULTS OF A NEW PROPOFOL DOSE INDIVIDUALIZATION METHODOLOGY <u>AURA SILVA</u> , JOAQUIM MONTEIRO, HELENA GONÇALINHO, SÓNIA CAMPOS, PAULA FRESCO, PAULA GUEDES DE PINHO, DAVID A. FERREIRA	INTERACTION OF ASPIRIN AND ANTIHYPERTENSIVE DRUGS: IMPACT ON LIPOXINS SYNTHESIS IN RAT RENAL CORTICAL AND MEDULLARY CELLS <u>MARIA JOÃO VALENTE</u> , JORGE CARVALHO, JOANA AFONSO, MANUELA MORATO, MÁRCIA CARVALHO, FÉLIX CARVALHO, TERESA SOUSA, ANTÓNIO ALBINO-TEIXEIRA
MEMORY IMPAIRMENTS IN RATS OVEREXPRESSING ADENOSINE A_{2A} RECEPTOR IN THE FOREBRAIN: FROM BEHAVIOR TO SYNAPTIC FUNCTION. <u>JORGE S. VALADAS</u> ; CLARISSA M. COMIM; TATIANA SHMIDT; ANA MARIA SEBASTIÃO; MICHAEL BADER AND LUÍSA V. LOPES.	INHIBITION OF DIPEPTIDYL PEPTIDASE-IV WITH SITAGLIPTIN SHOWS PROTECTIVE EFFECTS IN THE DIABETIC RETINA: STUDY IN AN ANIMAL MODEL OF TYPE 2 DIABETES <u>ANDREIA GONÇALVES</u> , ERMELINDO LEAL, ARTUR PAIVA, EDITE TEIXEIRA LEMOS, FREDERICO TEIXEIRA, CARLOS FONTES RIBEIRO, FLÁVIO REIS, ANTÓNIO FRANCISCO AMBRÓSIO AND ROSA FERNANDES

<p>EFFECT OF ANTIPSYCHOTICS ON L-DOPA UPTAKE IN DIFFERENTIATED SH-SY5Y CELLS <u>EDUARDO MOURA</u>, ELISABETE MAGALHÃES RIBEIRO, ELISABETE SILVA, MARIA PAULA SERRÃO, MARIA AUGUSTA VIEIRA COELHO</p>	<p>ANTIBODIES TOWARDS HDL COMPONENTS IN TYPE 2 DIABETES PATIENTS ARE ASSOCIATED WITH MODIFICATIONS IN THE ANTI-ATHEROGENIC PROPERTIES OF HDL <u>JOANA R. BATUCA</u>, FILIPE PAULA, CATARINA FAVAS, MARTA C AMARAL AND JOSÉ DELGADO ALVES</p>
<p>EVALUATION OF THE SEVERITY OF ADVERSE DRUG REACTIONS REPORTED FROM HOSPITALS AND AMBULATORY CARE SETTINGS: AN UPDATE <u>FRANCISCO BATEL-MARQUES</u>, CARLOS ALVES, DIOGO MENDES, CARLOS FONTES-RIBEIRO</p>	<p>THE MIXTURE OF "ECSTASY" AND ITS METABOLITES IS TOXIC TO HUMAN SH-SY5Y DIFFERENTIATED CELLS AT PHYSIOLOGICAL RELEVANT CONCENTRATIONS <u>DANIEL JOSÉ BARBOSA</u>, JOÃO PAULO CAPELA, LUÍSA MARIA FERREIRA, PAULA SÉRIO BRANCO, EDUARDA FERNANDES, MARIA DE LOURDES BASTOS AND FÉLIX CARVALHO</p>
<p>ACUTE PANCREATITIS ASSOCIATED WITH GLP-1 AGONISTS (EXENATIDE AND LIRAGLUTIDE) EXPOSURE: A META-ANALYSIS OF PUBLISHED RANDOMIZED CONTROLLED CLINICAL TRIALS <u>CARLOS ALVES</u>, ANA FILIPA MACEDO, FRANCISCO BATEL-MARQUES</p>	<p>ROLE OF THE PI3K/AKT PATHWAY IN THE PHARMACOLOGICAL MODULATION OF MULTIORGAN FAILURE <u>JOÃO ROCHA</u>, BRUNO SEPODES, RUI PINTO, MARIA-EDUARDO FIGUEIRA, NIMESH PATEL, CRISTOPH THIEMERMANN AND HELDER MOTA-FILIFE</p>
	<p>EVALUATION OF THE ANTI-INFLAMMATORY ACTIVITY OF ONE RASPBERRY (RUBUS IDAEUS L.) EXTRACT IN AN ANIMAL MODEL OF RHEUMATOID ARTHRITIS ELSA MECHA, CASSIUS FREITAS, JOÃO ROCHA, RUI PINTO, ROSÁRIO BRONZE, CRISTINA MARQUES, BRUNO SEPODES E MARIA-EDUARDO FIGUEIRA</p>

19:30 – Cerimónia Encerramento

Comissão Organizadora Local (FFUL):

Responsável: Helder Mota Filipe

Bruno Miguel Sepodes, Rui Manuel Pinto, João Rocha

Effects of Hexavalent Chromium on Bone Growth in Juveniles Wistar Rats

Ana Rafael⁽¹⁾; Carmen Alpoim⁽²⁾; A. Silvério Cabrita⁽¹⁾; Fernando Capela e Silva⁽³⁾

(1) Instituto de Patologia Experimental - Faculdade de Medicina da Universidade de Coimbra, Portugal (2) Departamento de Bioquímica da FCTUC Portugal (3) Instituto de Ciências Agrárias e Ambientais Mediterrânicas (ICAAM) - Departamento de Biologia - Universidade de Évora, Portugal

Workers at industrial settings, as well as the population in general is at risk of health problems caused by contaminating wastes, inadequate treated for their safe disposal. As result, certain toxic substances, such as hexavalent chromium [Cr(VI)] compounds, contaminate tap water and have reached the general population including children. The present study was undertaken to evaluate the effects of Cr(VI), in the form of potassium dichromate, on body and bone development in suckling Wistar rats.

Male and female Wistar rats were exposed to 20 ppm Cr(VI) contaminated drinking water during mating, pregnancy till birth and lactation of the juveniles that were sacrificed at the age of 21 days. One couple of the F0 generation received the same treatment that their progenitors received during mate, pregnancy and lactation till day 21 being then sacrificed. Control Wistar rats were given a similar treatment but in the absence of Cr(VI) contaminated water.

There were no histological alterations observed in the animals of control group. Conversely, Wistar rats treated with Cr(VI) contaminated drinking water showed a marked reduction of the plate growth, where sometimes the zones were not well defined, absence of a regular columnar disposal of the chondrocytes, extracellular matrix accumulation and the presence of groups of chondrocytes that are projected to the metaphysis. Changes in the formation and density of the bone trabeculae in metaphysis were also observed, as well as delay in the formation of the secondary centers of ossification that were, particularly, evident by the presence of cells of the cartilage that were not reabsorbed. In the test group in the first and at the second centers of ossification was also possible to observe the presence of bone not lamellar bone

We can conclude from this study that presence of Cr(VI) in the drinking water can have severe effects in health and in development of the juveniles.

Keywords: Hexavalent chromium, bone ossification, water, Wistar rats.