

## RDPA2009 PROGRAMME

### WEDNESDAY, September 9<sup>th</sup>

15.00 – 18.00 Registration

18.00 – 18.15 RDPA 2009 welcome by Academic Authorities

Chancellor Prof. E. Decleva

Pro Chancellor Prof. G. Sironi

Dean of the Faculty of Pharmacy Prof. C. Sirtori

RDPA 2009 Chairman: R. Maffei Facino (Italy)

18.15 – 19.00 **Opening Plenary Lecture**

R&D, THE 'SILENT KILLER' OF THE OLD ORGANIZATIONAL MODEL OF  
PHARMA INDUSTRY

*M. Scatigna (Sanofi – Aventis, Milan, Italy)*

19.00 – 20.30 Welcome cocktail

### THURSDAY, September 10<sup>th</sup>

Chairmen: C. Barbas (Spain), B. Chankvetadze (Georgia)

9.00 – 9.40 **Plenary lecture 1**

THE APPLICATION OF BIOCHROMATOGRAPHY TO THE DISCOVERY OF NEW DRUGS  
FOR THE TREATMENT OF BRAIN CANCERS

*M. Sanghvi, R. Moaddel, J.W. Wainer (National Institute on Aging/NIH, Baltimore,  
U.S.A.)*

9.40 – 10.10 **Key note lecture 1**

LC-BASED METABONOMICS: METHODS AND RESULTS

*I. Wilson (AstraZeneca, Mereside, UK)*

10.10 – 10.40 **Key note lecture 2**

HIGH THROUGHPUT AND HIGH RESOLUTION IN UHPLC-MS

*J-L. Veuthey, S. Rudaz, D. Guillarme (University of Geneva, University of Lausanne,  
Switzerland)*

10.40 – 11.40 **Poster session I - including coffee break**

Chairman: I. Wilson (UK)

### **Oral communications 1-4**

11.40 – 12.00 NEW CHIRAL STATIONARY PHASES FOR ENANTIOSEPARATIONS OF CHIRAL DRUGS  
IN NANO LIQUID CHROMATOGRAPHY AND CAPILLARY  
ELECTROCHROMATOGRAPHY (OC1)

*B. Chankvetadze (Tbilisi State University, Georgia)*

12:00 – 12:20 APPLICATION OF SILICA-BASED MONOLITHS FOR PURITY CONTROL OF ANTIBIOTICS (OC2)

*E. Adams, J. Hoogmartens (Catholic University of Leuven, Belgium)*

12:20 – 12:40 A RAPID AND SENSITIVE CAPILLARY ELECTROPHORESIS METHOD WITH FIELD-AMPLIFIED SAMPLE INJECTION AND IN-CAPILLARY DERIVATIZATION FOR METABOLISM STUDY OF SELENOMETHIONINE BY FLAVIN-CONTAINING MONOOXYGENASES (OC3)

*X. Hai, E. Adams, J. Hoogmartens, A. Van Schepdael (Catholic University of Leuven, Belgium)*

12:40 – 13:00 QUALITY CONTROL OF PET RADIOPHARMACEUTICALS USING IC WITH ELECTROCHEMICAL DETECTION (OC4)

*M. Santimaria<sup>1</sup>, R. Visentin<sup>1</sup>, G. Bencivenga<sup>1</sup>, A. Bellini<sup>1</sup>, C. D'anna<sup>1</sup>, F. Abballe<sup>2</sup>, A. Severoni<sup>2</sup> (<sup>1</sup>Unità di Radiofarmacia PET c/o Policlinico "A. Gemelli", Roma; <sup>2</sup> Dionex S.p.a., S. Donato Milanese, Milano, Italy)*

13.00 – 14.30 Lunch

Chairmen: J. Hoogmartens (Belgium)

14.30 – 15.10 **Plenary lecture 2**

PROTEIN CARBONYLS AS A BIOMARKER OF OXIDATIVE STRESS

*K. Uchida (Nagoya University, Japan)*

15.10 – 15.40 **Key note lecture 3**

PROTEOMIC ANALYSIS OF POST-TRANSLATIONAL MODIFICATIONS OF HUMAN HISTONES IN CANCER DRUG DISCOVERY

*M. Naldi, N. Calonghi, L. Masotti, C. Parolin, V. Andrisano (University of Bologna, Italy)*

**Oral communication 5**

15.40 – 16.00 MOLECULAR MODELLING STUDIES IN THE CHIRAL LIGAND-EXCHANGE CHROMATOGRAPHY OF AMINO ACIDS (OC5)

*B. Natalini, R. Sardella, A. Macchiarulo, M. Marinozzi, N. Giacchè, R. Pellicciari (University of Perugia, Italy)*

16.00 – 17.00 **Poster session I - including coffee break**

Chairman: H. Lingeman (The Netherlands)

**Oral communications 6-8**

17.00 – 17.20 CAPILLARY ELECTROPHORESIS: A POWERFUL TOOL FOR THE ANALYTICAL DEVELOPMENT OF TARGETED ULTRASOUND CONTRAST AGENTS (OC6)

*S. Cherkaoui (Bracco Research, Geneva, Switzerland)*

17:20 – 17:40 A UNIVERSAL LC-MS APPROACH FOR SMALL MOLECULES: APPLICATION TO THE PROFILING OF FREE FATTY ACIDS IN HUMAN PLASMA (OC7)

*A. Cappiello, G. Famiglioni, P. Palma, V. Termopoli, H. Trufelli (University of Urbino Italy)*

17:40 – 18:00 BIOASSAY-GUIDED HPLC PURIFICATION TURMERONES FROM TURMERIC OIL OF *CURCUMA LONGA* (OC8)

*P.M. Luthra, R. Singh and J. Singh (University of Delhi, India)*

## **FRIDAY, September 11<sup>th</sup>**

Chairman: M. Malet-Martino (France), G. Massolini (Italy)

### **9.00 – 9.40 Plenary lecture 3**

*IN VIVO* MOLECULAR BIOLUMINESCENCE FUNCTIONAL IMAGING: A NEW POTENT TOOL FOR DRUG DEVELOPMENT AND SCREENING

*A. Roda (Alma Mater Studiorum University of Bologna, Italy)*

### **9.40 – 10.10 Key note lecture 4**

MS BINDING ASSAYS

*K.T. Wanner (Ludwig-Maximilians-Universität München, Germany)*

### **10.10 – 10.40 Key note lecture 5**

ANALYTICAL AND CHEMOMETRIC TOOLS FOR BIOMARKER DISCOVERY THROUGH METABOLIC FINGERPRINTING WITH SEPARATION TECHNIQUES

*C. Barbas<sup>1</sup>; A. Garcia<sup>1</sup>; I. Garcia-Perez<sup>1</sup>; S. Angulo<sup>1</sup>; J. Teul<sup>1,2</sup>; M. Ciborowski<sup>1,2</sup>; M.P. Martinez-Alcazar<sup>1</sup>; J. Ruperez<sup>1</sup> (<sup>1</sup>Universidad San Pablo-CEU, Boadilla del Monte, Madrid, Spain; <sup>2</sup>Medical University of Bialystok, Poland)*

### **10.40 – 11.40 Poster session II - including coffee break**

Chairmen: J.L. Veuthey (Switzerland), C. Bertucci (Italy)

### **Oral communications 9-13**

**11.40 – 12.00** NEW ANALYTICAL STRATEGIES TO PERFORM AUTOMATED PHASE I DRUG METABOLISM STUDIES (OC9)

*R. Nicoli, R. Curcio, S. Rudaz, J-L. Veuthey (University of Geneva, Switzerland)*

**12.00 – 12.20** ANALYSIS OF NATURAL COMPOUNDS BY INNOVATIVE TECHNIQUES – MEKC AND MONOLITHIC CEC FOR THE DETERMINATION OF NAPHTHOQUINONES IN *ELEUTHERINE AMERICANA* (OC10)

*M. Ganzera (University of Innsbruck, Austria)*

**12.20 – 12.40** APPLICATION OF MICRO FABRICATED LC/MS/MS SYSTEM FOR THE QUALITATIVE AND QUANTITATIVE ANALYSIS OF DMPK SAMPLES (OC11)

*R.S. Plumb<sup>1</sup>, P.D. Rainville<sup>3</sup>, I.D. Wilson<sup>2</sup> (<sup>1</sup>Imperial College, London, UK; <sup>2</sup>Astra Zeneca, Maccelfield, Cheshire, UK; <sup>3</sup>Waters Corporation, Milford, MA, USA)*

**12.40 – 13.00** RECENT ADVANCES IN THE CHROMATOGRAPHIC ANALYSIS OF PHENETHYLAMINE ALKALOIDS IN NATURAL PRODUCTS (OC12)

*F. Pellati, S. Benvenuti (University of Modena and Reggio Emilia, Italy)*

**13.00 – 13.20** IMMUNO-CAPTURE AS ULTIMATE SAMPLE CLEAN-UP IN LC-MS/MS OF BIOMARKERS (OC13)

*L. Reubsaet, B. Winther, H. Lund, T. Grønhaug Halvorsen (University of Oslo, Norway)*

**13.20 – 14.30** Lunch

Chairmen: I.W. Wainer (U.S.A.), G. Aldini (Italy)

### **14.30 – 15.00 Key note lecture 6**

SOME ANALYTICAL TECHNIQUES TO DETECT COUNTERFEIT DRUGS

*M. Malet-Martino (Université Paul Sabatier, Toulouse, France)*

### **15.00 – 15.30 Key note lecture 7**

CHARACTERIZATION OF IN VITRO DRUG RELEASE

*D. Franchi (GlaxoSmithKline S.p.A., Verona, Italy)*

### Oral communication 14

15.30 – 15.50 MICELLAR CHROMATOGRAPHIC PARTITION COEFFICIENTS – AN ALTERNATIVE TO TRADITION (OC14)

*L. Waters (University of Huddersfield, UK)*

15.50 – 16.50 **Poster session II - including coffee break**

Chairmen: K.T. Wanner (Germany), M. Carini (Italy)

### Oral communications 15-18

16.50 – 17.10 IMMOBILIZED MEMBRANE BASED AFFINITY CHROMATOGRAPHY FOR STUDYING ABC TRANSPORTER-DRUG INTERACTIONS (OC15)

*P.A. Bhatia, R. Moaddel and I.W. Wainer (National Institute on Aging, National Institutes of Health, Baltimore, USA)*

17.10 – 17.30 IMPROVED CURCUMIN PLASMA LEVELS AFTER ADMINISTRATION IN HEALTHY VOLUNTEERS OF MERIVA® (OC16)

*P. Morazzoni<sup>1</sup>, A Riva<sup>1</sup>, D. Savio<sup>2</sup>, S. Pengo<sup>2</sup> (<sup>1</sup>Indena S.p.A, Milan, Italy; <sup>2</sup>R&D Labs, Saronno, Italy)*

17.30 – 17.50 PROTEOMIC ANALYSIS OF ENDOTHELIAL CELL SECRETOME: A TOOL FOR THE STUDY OF THE PLEIOTROPIC EFFECTS OF STATINS (OC17)

*C. Banfi<sup>1</sup>, M. Brioschi<sup>1</sup>, S. Barcella<sup>1</sup>, E. Tremoli<sup>1,2</sup> (<sup>1</sup>Centro Cardiologico Monzino, I.R.C.C.S, <sup>2</sup> University of Milan, Italy)*

17.50 – 18.10 HPLC ANALYSIS OF RISPERIDONE AND FEXOFENADINE FOR TDM PURPOSES: PRELIMINARY RESULTS WITHIN A MULTIDISCIPLINARY STUDY ON P-GLYCOPROTEIN (P-gp) ACTIVITY (OC18)

*L. Micolini<sup>1</sup>, L. Albers<sup>2</sup>, M.A. Raggi<sup>1</sup>, D. Gripeos<sup>3</sup>, C. Reist<sup>3</sup> (<sup>1</sup>University of Bologna, Italy; <sup>2</sup>Veterans Affairs Medical Center, Mental Health Care, Long Beach, USA; <sup>3</sup>Veterans Affairs Medical Center, Research and Development, Long Beach, USA)*

20.30 Disco dinner

### SATURDAY, September 12<sup>th</sup>

Chairmen: V. Andrisano (Italy), P.G. Righetti (Italy)

9.00 – 9.30 **Key note lecture 8**

STUDYING PROTEIN PHOSPHORYLATION BY LC-MS: APPLICATION TO AMNIOTIC FLUID

*G. Massolini<sup>a</sup>, C. Temporini<sup>a</sup>, L. Dolcini<sup>b</sup>, R. Nicoli<sup>c</sup>, E. Calleri<sup>a</sup>, M. Galliano<sup>b</sup>, J.-L. Veuthey<sup>c</sup>, S. Rudaz<sup>c</sup>, L. Regazzoni<sup>d</sup>, G. Aldini<sup>d</sup> (<sup>a,b</sup> University of Pavia, Italy; <sup>c</sup>University of Geneva, University of Lausanne, Switzerland; <sup>d</sup> University of Milan, Italy)*

9.30 – 10.00 **Key note lecture 9**

SELECTIVE (ON-LINE) SAMPLE PREPARATION FOR LC-MS ANALYSIS OF BIOLOGICALLY ACTIVE COMPOUNDS

*H. Lingeman (University of Amsterdam, The Netherlands)*

### Oral communications 19-21

10.00 – 10.20 SPECIATION OF ARSENIC SPECIES IN URINE FOLLOWING INTRAVENOUS ADMINISTRATION OF ARSTHINOL IN MICE (OC19)

*I. Ajana<sup>1</sup>, A. Astier<sup>2</sup>, S. Gibaud<sup>1</sup> (<sup>1</sup>Nancy Université, France ; <sup>2</sup>Hôpital Henri Mondor (APHP), Créteil, France)*

10.20 – 10.40 QUANTITATIVE STRUCTURE-ACTIVITY RELATIONSHIP (QSAR) DETERMINATION OF DISTINGUISHING MOLECULAR DESCRIPTORS FOR THE SELECTIVE ESTROGEN RECEPTOR BINDING OF PESTICIDES (OC20)

*S. Agatonovic-Kustrin and M. Alexander (School of Pharmacy and Applied Sciences La Trobe, University Bendigo, Australia)*

10.40 – 11.00 EFFECT OF LANTHANUM AND GADOLINIUM ON BIOSYNTHETIC ABILITIES OF *REYNOUITRIA JAPONICA* IN VITRO CULTURE (OC21)

*V. Kohoutkova<sup>1</sup>, P. Babula<sup>1</sup>, R. Opatrilova<sup>1</sup>, O. Vrana<sup>2</sup>, V. Adam<sup>3</sup>, J. Zehnalek<sup>3</sup>, R. Kizek<sup>3</sup> (<sup>1</sup>University of Veterinary and Pharmaceutical Sciences, Brno, Czech Republic; <sup>2</sup>Institute of Biophysics, Academy of Sciences of the Czech Republic, Brno, Czech Republic; <sup>3</sup>Mendel University of Agriculture and Forestry, Brno, Czech Republic)*

11.00 – 11.30 Coffee break

Chairmen: R. Maffei Facino (Italy), S. Pinzauti (Italy)

11.30 – 12.00 **Key note lecture 10**

A CAPILLARY MICROFLUIDIC SYSTEM FOR IMMUNOAFFINITY AND MOLECULARLY IMPRINTED POLYMER SEPARATIONS

*K. A. Shah, M. C. Peoples, M. S. Halquist and H. T. Karnes (Richmond, USA)*

**Oral communications 22-24**

12.00 – 12.20 A PRECURSOR ION SCAN APPROACH IN LIQUID CHROMATOGRAPHY-ELECTROSPRAY-TANDEM MASS SPECTROMETRY TO DETECT CORTICOSTEROIDS AND THEIR METABOLITES IN HUMAN URINE (OC22)

*A. Panusa<sup>1</sup>, M. Orioli<sup>1</sup>, G. Aldini<sup>1</sup>, A. Giombini<sup>2</sup>, C. Tranquilli<sup>2</sup>, M. Carini<sup>1</sup> (<sup>1</sup>University of Milan, Italy; <sup>2</sup>Istituto di Medicina e Scienza dello Sport, Rome, Italy)*

12.20 – 12.40 FURTHER DEVELOPMENT OF LACTOFERRIN IMMUNOSENSOR (OC23)

*M. Tomassetti, E. Martini, L. Campanella (University "La Sapienza", Roma, Italy)*

12.40 – 13.00 INTEGRATED STRATEGIES FOR AFFINITY-BASED SCREENING: FROM BINDING TO *IN SILICO* STUDIES (OC24)

*L. Regazzoni<sup>1</sup>, R. Colombo<sup>2</sup>, L. Bertoletti<sup>2</sup>, G. Vistoli<sup>1</sup>, M. Carini<sup>1</sup>, R. Maffei Facino<sup>1</sup>, G. Caccialanza<sup>2</sup>, G. Aldini<sup>1</sup>, E. De Lorenzi<sup>2</sup> (<sup>1</sup>University of Milan, Italy; <sup>2</sup> University of Pavia, Italy)*

13.00 – 13.30 **Closing Lecture**

PLUCKING, PILLAGING AND PLUNDERING PROTEOMES WITH COMBINATORIAL PEPTIDE LIGAND LIBRARIES

*P.G. Righetti, E. Boschetti*

*Politecnico di Milano, Italy and CEA-Saclay-DSV, iBiTec-S, Gif-sur-Yvette, France*

13.30 – 13.40 *Closing Remarks*

13.40 – 14.40 *Farewell Drink*

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*The programme could be subject to change.*

*LAST UPDATE: August 28th, 2009*

*Updates at: [www.rdpa2009.com](http://www.rdpa2009.com)*