13th Conference of the European Society for Clinical Hemorheology (E.S.C.H.)
June 26th - 29th, 2005 - Siena, Italy

1° Congresso Nazionale della Società Italiana di Emoreologia Clinica e Microcircolazione (S.I.E.C.M.)
28 Giugno 2005 - Siena

PROGRAMME / PROGRAMMA

President of the Conference: Sandro Forconi
Scientific Secretariat
Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica
Università degli Studi di Siena
Policlinico Santa Maria alle Scotte - Viale Bracci - 53100 Siena, Italy

www.unisi.it/eventi/13ecch
13th Conference of the European Society for Clinical Hemorheology

The 13th Conference of the European Society for Clinical Hemorheology will be held in Siena from the 26th to the 29th of June 2005. As pro-tempore President of the Society I am happy to welcome the European National Societies and Groups, the members of the Advisory Committee as well as non-European scholars in the field of hemorheology to participate to the Conference by sending proposals for topics, lectures, symposia, oral communications and posters. This is the third time (the first was in 1985 and the second in 1995) that Siena hosts the Conference of the E.S.C.H. and, for a lucky historical coincidence, we will have this important scientific meeting again after twenty and ten years. The participants to the previous meetings know very well that this town offers a wide range of opportunities not only from a scientific point of view but also as far as hospitality is concerned. In the week following the Conference there will be the horse race denominated the “Palio”. Those who will have the possibility to stay here will have the pleasure to be involved in one of the most appreciated events testifying the old glory of Siena throughout the middle ages and the renaissance.

During the Conference, a ceremony will be held for the presentation of the Fahraeus Medal, assigned according the rules stated in the Constitution of the Society in recognition of scientific excellence in the field. I am honoured to welcome such distinguished scientists in my birth city.

Sandro Forconi  
President of the European Society for Clinical Hemorheology

1° Congresso Nazionale della Società Italiana di Emoreologia Clinica e Microcircolazione

Questo è il 1° Congresso della Società Italiana di Emoreologia Clinica e Microcircolazione (S.I.E.C.M.), Società che nasce dalla fusione, auspicata da tempo, della Società Italiana di Emoreologia Clinica (S.I.E.C.) e della Società Italiana per lo Studio della Microcircolazione (S.I.S.M.). In realtà questo Congresso sarebbe stato l’11° per la S.I.E.C. e il 22° per la S.I.S.M. Dal punto di vista scientifico la fusione ha avuto una sua logica nella quasi completa integrazione tra gli argomenti di studio e di ricerca che facevano parte del bagaglio culturale delle due precedenti società e nella quasi totale sovrapposizione dell’elenco dei membri delle due Società “madri”.

Il Consiglio Direttivo della Società, che è anche il Comitato Scientifico del Congresso, è attualmente formato dalla unificazione dei due precedenti consigli direttivi. Il Congresso di Siena sarà l’occasione per portare a compimento il processo elettorale così come previsto dalle norme statutarie e per dare vita al nuovo Direttivo che guiderà la Società nei prossimi anni.

Arrivederci a Siena!

Sandro Forconi  
Presidente della S.I.E.C.M.
EUROPEAN SOCIETY FOR CLINICAL HEMORHEOLOGY
INTERNATIONAL ADVISORY COMMITTEE

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Bernhard Angelkort
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Kalman Toth
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Amparo Vayá
Irena Velcheva
Jean-Luc Wautier
P. Rhodri Williams
Sebastian Wolf

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COMITATO SCIENTIFICO

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Franco Pitzus
Marco Rossi
Antonio Strano
Anna Rita Todini
Maria Giuliana Tozzi Ciancarelli
Luca Trabalzini
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<th>Sunday 26th</th>
<th>AULA MAGNA</th>
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<td>12.30-13.30</td>
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| Tuesday 28th | | | | | |
| 9.00-11.00 | Symposium S2 | 9.00-11.00 | Oral Communications Session C1 | | |
| 11.00-11.30 | Break | | | | |
| 11.30-12.00 | Lecture L4 | | | | |
| 13.30-14.30 | Lunch | | | | |
| 14.30-15.30 | Symposium S3 | 14.30-16.30 | Oral Communications Session C2 | | |
| 16.30-17.00 | Break | | | | |
| 17.00-19.00 | Symposium S4 | 17.00-19.00 | Oral Communication Session C3 | | |
| Wednesday 29th | | | | | |
| 9.00-10.30 | Symposium S5 | 9.00-10.30 | Oral Communication Session C4 | | |
| 10.30-11.00 | International Medical Consensus Meeting | | | | |
| 11.00-11.30 | Break | | | | |
| 11.30-12.00 | Lecture L5 | | | | |
| 12.00 | Closing Ceremony | | | | |
PROGRAMME

Sunday 26

*Venue “Palazzo del Rettorato”*

16.00
*Opening Ceremony*

17.00-18.00

**Fahraeus Medal Award Presentation Ceremony and Lecture**

Chairperson: S. Forconi, President of the E.S.C.H.

17.00
“Laudatio”
*Sandro Forconi*, Sofia 2003 Fahraeus Award winner

17.15
Presentation of the Fahraeus Medal Award

17.30
**Fahraeus Lecture**

*Micel René Boisseau*

*Pharmacology Department, University of Bordeaux 2, Bordeaux, France*

**HEMORHEOLOGY AND VASCULAR DISEASES: RED CELLS SHOULD RUB UP TO THE WALL, LEUCOCYTES SHOULD COPE WITH IT**

18.00
End of the Ceremony

18.30
*Welcome Cocktail*
Monday 27

Venue “Centro Didattico del Policlinico”

8.00-9.00
Registration

9.00-10.30
Symposium S1 – Aula Magna
Hemorheology and Hemodynamics
(organized together with the Internation Society of Clinical Hemorheology)
Chairpersons: H.J. Meiselman (U.S.A.), O.K. Baskurt (Turkey)

S1.1 HEMORHEOLOGY AND HEMODYNAMICS: DOVE ANDARE?
Herbert J. Meiselman
Department of Physiology and Biophysics, Keck School of Medicine, 1333 San Pablo Avenue, MMR 626, Los Angeles, CA 90033 USA

S1.2 HEMORHEOLOGICAL PARAMETERS AS DETERMINANTS OF MYOCARDIAL TISSUE HEMATOCRIT VALUES
Oguz K. Baskurt1, Ozlem Yalcin1, Firat Gungor3, Herbert J. Meiselman3
1Department of Physiology, Akdeniz University Faculty of Medicine, Antalya, Turkey
2Department of Nuclear Medicine, Akdeniz University Faculty of Medicine, Antalya, Turkey
3Department of Physiology and Biophysics, USC Keck School of Medicine, Los Angeles, CA, USA

S1.3 IMPROVEMENT OF TISSUE PERFUSION, BLOOD FLOW AND LOWERING OF BLOOD PRESSURE DUE TO INCREASED BLOOD AND PLASMA VISCOSITY
Judith Martini1, Pedro Cabrales2, Adolfo Chávez Negrete3, Amy G.Tsai1,2 and Marcos Intaglietta1,2
1Department of Bioengineering University of California, San Diego, La Jolla, CA 92093, USA, 2 La Jolla Bioengineering Institute, La Jolla, CA 92037, USA, 3 Instituto Mexicano del Seguro Social, Centro Médico Siglo XXI, 06725 México DF, México.

S1.4 CEREBRAL HYPER- AND HYPOPERFUSION AND ITS LOCAL AND SYSTEMIC HEMORHEOLOGICAL EFFECTS IN A PORCINE MODEL
Norbert Nemeth1, Jens Soukup2, Matthias Menzel3, Andreas Rieger3, Istvan Furka1, Iren Miko1
1Department of Operative Techniques and Surgical Research, Medical and Health Science Center, University of Debrecen, Debrecen, Hungary, 2Department of Anaesthesiology and Intensive Care Medicine, Martin Luther University, Halle-Wittenberg, Germany, 3Department of Neurosurgery, Martin Luther University, Halle-Wittenberg, Germany

10.30-11.00
Lecture L1 – Aula Magna
Chairperson: J.-L. Wautier (France)
STUDIES ON BLOOD ELECTRORHEOLOGICAL PROPERTIES
N. Antonova1, P. Riha2
1Institute of Mechanics and Biomechanics, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria
2Institute of Hydrodynamics, Academy of Sciences of the Czech Republic, 166 12 Prague, Czech Republic

11.00-11.30
Break

11.30-12.00
Lecture L2 – Aula Magna
Chairperson: J.F. Stoltz (France)
GLYCATED PROTEINS PROVOKE AN ENDOTHELIAL CELL DYSFUNCTION
Jean-Luc Wautier
INTS, UFR Lariboisière Saint-Louis Paris 7, 6 rue Alexandre Cabanel 75015 Paris, France
12.00-12.30
*Lecture L3 – Aula Magna*
Chairperson: S. Forconi (Italy)
**COMPUTERISED CARDIOGREEN PERFUSOGRAPHY – A TOOL ALLOWING TO QUANTIFY PERFUSION HOMOGENEITY IN PATIENTS**
Holger Schmid-Schönbein, Thomas Kirschkamp, Marcus Spellerberg and Carsten Jaeger
*Department of Physiology, RWTH Aachen, D – 52074 Aachen.*

12.30-13.30
*Meeting of the Advisory Committee of the European Society for Clinical Hemorheology (E.S.C.H.) – Aula Magna*

13.30-14.30
*Lunch*

15.00-20.00
*Social Event*
Tuesday 28

Venue “Centro Didattico del Policlinico”

9.00-11.00

**Symposium S2 – Aula Magna**

Hemorheology in clinical medicine - from genetic background to clinical significance
(organized together with the Hungarian Society of Hemorheology)
Chairpersons: K. Toth (Hungary), L. Bogar (Hungary)

**S2.1 VISCOSITY, HEMOSTASIS AND INFLAMMATION IN ATHEROSCLEROTIC HEART DISEASES**
Gábor Késmárky, Gergely Fehér, Katalin Koltaí, Beáta Horváth, Kálmán Tóth
1st Department of Medicine, University of Pécs, Hungary

**S2.2 CONTRIBUTION OF THE -455G/A POLYMORPHISM AT THE BETA FIBRINOGEN GENE AND LEIDEN MUTATION TO HEMORHEOLOGICAL PARAMETERS IN ISCHEMIC STROKE PATIENTS**
Endre Pongrácz, Hajnalka Andrikovics, Márta Csornai, Zoltán Nagy
1 Dept. Neurology-Stroke, Central Hospital, Ministry of Interior, Budapest, Hungary, 2 Laboratory of Molecular Genetics, National Institute of Hematology, Budapest, Hungary, 3 Dept. Neurology, County Hospital, Kecskemét, Hungary, 4 National Stroke Center, Department of Vascular Neurology, Semmelweis University, Budapest, Hungary

**S2.3 STUDY ON THE HEMORHEOLOGICAL PARAMETERS OF OLDEST OLD RESIDENTS IN THE EAST-HUNGARIAN CITY, DEBRECEN**
Sándor Imre, Ágnes Kovács, Éva Várady, Zita Szikszaí
1st Department of Internal Medicine, Research Group of Gerontology - Medical and Health Science Center, University of Debrecen, Hungary, 2 Laboratory of City Medical Service - Debrecen, Hungary, 3 Institute of Nuclear Research of the Hungarian Academy of Sciences - Debrecen, Hungary

**S2.4 HEMORHEOLOGICAL PARAMETERS AND AGING**
1st Department of Medicine, School of Medicine

**S2.5 HEMATOCRIT AND BLOOD VISCOSITY RATIO INDICATES RHEOLOGICAL OXYGEN CARRYING CAPACITY AND OPTIMAL HEMATOCRIT OF HUMAN BLOOD**
Lajos Bogar, Gabor Kesmarky, Peter Kenyeres, Livia Szelig, Gergely Fehér, Kalman Toth
1st Department of Anaesthesia and Intensive Care - University of Pécs, Hungary

**S2.6 HEMOSTASEOLOGICAL AND RHEOLOGICAL PROPERTIES OF OVERWEIGHT AND OBESE PATIENTS**
Bernát Sándor Iván, Sidó Zoltán, Pongrácz Endre
1 Central Hospital of Hungarian Ministry of Defence, 2nd Dept. of Internal Medicine-Cardiology, Budapest
2 Central Hospital of Hungarian Ministry of Home Office Dept. Neurology and Stroke, Budapest

9.00-11.00

**Oral Communications Session C1 – Aula 1**

Red blood cells aggregation and deformability - pathology
Chairpersons: N. Antonova (Bulgaria), A. Vayá (Spain)

**C1.1 RHEOMETRICAL AND COMPUTATIONAL STUDIES OF BLOOD VISCOELASTICITY DURING COAGULATION**
P.R.Williams, K. Hawkins, C. Wright, A. Evans, H. Simkin
School of Engineering, University of Wales Swansea, Singleton Park, Swansea, SA2 8PP, UK.
§ NHS Trust Morriston, Swansea
C1.2 THE LOSS OF ERYTHROCYTE DEFORMABILITY UNDER OXIDATIVE STRESS IS CAUSED BY PROTEIN DEGRADATION RATHER THAN BY LIPID PEROXIDATION
Yousif Bilti1, Mohammed Irhimeh2, Sana' Suboh3
1 Zarka University College, Al-Balqa’ Applied University, Zarka P.O.Box (313), Jordan
2 Department of Biological Sciences, University of Jordan, Amman, Jordan
3 Department of Biological Sciences, Al-Hashemia University, Zarka, Jordan

C1.3 EFFECTS OF MACROMOLECULES AND THEIR APHERETIC ELIMINATION ON BLOOD RHEOLOGY: RHEOSPECIFITY OF RED BLOOD CELL (RBC) AGGREGATES DEPENDING ON THE STRENGTH OF AGGREGATING FORCES
Kirschkamp Ta, b, c, Goebel Wb, Perkkio Tc, Schmid-Schönbein Hb;
aIZKF BIOMAT – Interdisciplinary Center for Clinical Research, RWTH Aachen
bDepartment of Physiology, Aachen University of Technology
cDepartment of Ophthalmology, University Clinics Aachen

C1.4 CORRELATION OF REDUCTION OF ERYTHROCYTE DEFORMABILITY WITH DIABETIC NEPHROPATHY
Sehyun Shin1, Yunhee Ku1, Lijuen Zhang1, Yu-kyung Kim2 and Jang-Soo Suh2
1 School of Mechanical Engineering, Kyungpook National University
2 Dept. of Laboratory Medicine, Kyungpook National University

C1.5 EFFECTS OF HEROIN AND METHADONE MAINTENANCE THERAPY ON BLOOD RHEOLOGY IN HEROIN ABUSERS
Yonko Savov1, Nadia Antonova2, Elissaveta Zvetkova1, Iskra Sainova1, Yordanka Gluhcheva1, Ivan Ivanov2
1 Institute of Experimental Morphology and Anthropology – Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria
2 Institute of Mechanics and Biomechanics - Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria

C1.6 RHEOLOGICAL PROPERTIES OF BLOOD AND PARAMETERS OF PLATELETS AGGREGATION IN ARTERIAL HYPERTENSION
Elena Konstantinova, Lilia Ivanova, Tatiyana Tolstaya, Elena Mironova
Belarussian Centre “Cardiology”, Minsk, Belarus

8.30-12.00
International Medical Consensus Meeting – Aula 3
THE USE OF VENOUS ACTIVE DRUGS IN THE MANAGEMENT OF CHRONIC VENOUS DISEASE
Private session – invited persons only

11.00-11.30
Break

11.30-12.00
Lecture L4 – Aula Magna
Chairperson: F. Jung (Germany)
ISCHEMIA AND ISCHEMIC PRECONDITIONING: THE ENDOTHELIAL POINT OF VIEW
Tommaso Gori, Sandro Forconi
Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica, Università degli Studi di Siena, Italy

12.00-13.30
Poster Session P1 - Aula 4
Chairpersons:
from P1.1 to P1.7: I. Velcheva (Bulgaria), J.-F. Brun (France)
from P1.8 to P1.13: P. Capecci (Italy), G. Mchedlishvili (Georgia)
from P1.14 to P1.20: M.G. Tozzi Ciancarelli (Italy), C. Saldanha (Portugal)
ATHEROSCLEROSIS

P1.1 HEMORHEOLOGICAL PARAMETERS IN CORRELATION WITH THE RISK FACTORS FOR CAROTID ATHEROSCLEROSIS
I. Velcheva1, N. Antonova2, E. Titianova3, P. Damianov4, N. Dimitrov5, I. Ivanov2
1 Department of Neurology, Medical University, Sofia, Bulgaria, 2 Institute of Mechanics and Biomechanics, Bulgarian Academy of Sciences, Sofia, Bulgaria, 3 Military Medical Academy, Sofia, Bulgaria

P1.2 POLYMORPHONUCLEAR LEUKOCYTE MEMBRANE FLUIDITY AND CYTOSOLIC Ca2+ CONCENTRATION IN SUBJECTS WITH VASCULAR ATHEROSCLEROTIC DISEASE SUBDIVIDED ACCORDING TO THE EXTENT
Rosalia Lo Presti, Baldassare Canino, Caterina Carollo, Daniela Lucido, Filippo Ferrara, Adele Romano, Gregorio Caimi
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo, Italy

P1.3 CONNECTIVE TISSUE GROWTH FACTOR IS RELEASED FROM PLATELETS UNDER HIGH SHEAR STRESS AND IS DIFFERENTIALLY EXPRESSED IN ENDOTHELIUM ALONG ATHEROSCLEROTIC PLAQUES
Iwona Cicha1, Atilla Yilmaz2, Yoji Suzuki2, Nobuji Maeda2, Werner G. Daniel1, Margarete Goppelt-Struebe3, Christoph D. Garlichs1
1 Medical Clinic II, University of Erlangen-Nuremberg, Germany, 2 Department of Physiology, School of Medicine, Ehime University, Japan, 3 Medical Clinic IV, University of Erlangen-Nuremberg, Germany

P1.4 INVOLVEMENT OF HEMORHEOLOGICAL DISORDERS IN DEVELOPMENT OF CORONARY HEART DISEASE
T. Urudashvili1, M. Mantskava2, N. Momtseidze2, N. Narsha1, G. Meheshlshvili2
1 Chair of Internal Medicine, State Medical University, Vazha-Pshavela Av. 33, 0077, Tbilisi
2 Microcirculation Research Center I. Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi.

LIPIDS

P1.5 FATTY ACID COMPOSITION IN ERYTHROCYTES OF MAMMALS WITH DIFFERENT DEGREE OF RED CELL AGGREGATION
Roberto Plasenzotti1, Ursula Windberger1, Franz Ulbert1, Wolf Osterode2
1 Division for Biomedical Research, Medicine University of Vienna, 2 Department of Dairy Research and Bacteriology, University of Vienna

P1.6 RELATIONSHIP OF HEMORHEOLOGICAL ALTERATION TO LIPID PROFILE DURING NORMAL PREGNANCY AND PRE-ECLAMPSIA
S. Stoef1, Sv. Hadjieva2, Sv. Jovtchev3, L. Trajkov1, T. Galabova1, M. Vretenarska2, I. Raichev3, I. Dikov4, L. Lambreva2, M. Penev2
1 Department of Physics and Biophysics - Medical University Sofia, Bulgaria, 2 Department Clinical Laboratory and Immunology, 3 Clinics for Nephrology and Transplantation, Multiprofiter Hospital for Active Treatment “Alexandrowska” - Medical University Sofia, Bulgaria, 4-1st Neurological Clinics, State Hospital of Neurology and Psychiatry “St. Naum” 4-th km - Medical University Sofia, Bulgaria

P1.7 HEMORHEOLOGICAL DISTURBANCES CORRELATE WITH THE LIPID PROFILE BUT NOT WITH THE NCEP-ATPIII SCORE OF THE METABOLIC SYNDROME.
I Aloulou, E Varlet-Marie and J-F Brunn
Service Central de Physiologie Clinique, Centre d’Exploration et de Réadaptation des Anomalies du Métabolisme Musculaire (CERAMM), CHU Lapeyronie 34295 Montpellier-cédex 5, France

NEW DRUGS AND NEW EFFECTS

P1.8 EVALUATION OF CIRKAN® IN ACUTE HAEMORRHOIDAL CRISIS: A DOUBLE-BLIND, RANDOMIZED AND PLACEBO-CONTROLLED STUDY
Gilbert Tucat1, Claire Nguyen Le2, Jean-Marie Piboudin2
1 Cabinet Médical Monceau, Paris, France
2 Pierre Fabre Médicament, Castres, France
P1.9 THE RED BLOOD CELL DEFORMABILITY ALTERATIONS UNDER DESFLURAN ANESTHESIA IN RATS
Mükerrem Betül Yerer1, Sami Aydoğan1, Faruk Metin Çomu2, Mustafa Arslan3, İşın Güneş-Ekinci4.
1 University of Erciyes, Faculty of Medicine, Department of Physiology, Kayseri, 2University of Kırıkkale, Faculty of Medicine, Department of Physiology, Kırıkkale, 3University of Gazi, Faculty of Medicine, Department of Anesthesiology, Ankara, 4University of Erciyes, Faculty of Medicine, Department of Anesthesiology, Kayseri, TURKEY

P1.10 THE INFLUENCE OF TWO DIFFERENT HYDROXYETHYL STARCH SOLUTIONS (6% HES 130/0.4 AND 200/0.5) ON BLOOD VISCOSITY
Michael Mark1, Thomas A. Neff 2, Lukas Fischler1, Reto Stocker2, Walter H. Reinhart1
1 Department of Internal Medicine, Kantonsspital, CH-7000 Chur, Switzerland
2 Division of Surgical Intensive Care, University Hospital, CH-8091 Zurich, Switzerland

P1.11 ACUTE ADMINISTRATION OF ILOPROST IN PATIENTS WITH RAYNAUD’S PHENOMENON ASSOCIATED WITH SYSTEMIC SCLEROSIS: ELECTROPHYSIOLOGICAL AND MICROCIRCULATORY FINDINGS
Pier Leopoldo Capecchi1, Maurizio Acampa2, Marcello Pastorelli3, Francesca Guideri1, Serena Rechichi1, Pietro Enea Lazzerini1, Federica Biagi1, Moira Servi1, Alessandro Pontani2, Franco Laghi Pasini1, Alberto Auteri2.
Dipartimento di Medicina Clinica e Scienze Immunologiche, 1Sezione di Immunologia Clinica, 2Sezione di Medicina Interna- Università degli Studi di Siena, Italy

SHOCK

P1.12 COMPARISON OF BLOOD RHEOLOGICAL CHANGES IN THE MICROCIRCULATION DURING THE HEMORRHAGIC AND TRAUMATIC SHOCKS IN RATS
Jemal Tatarishvili, Tea Sordia, George Mchdelishvili
Microcirculation Research Center, I.Beritashvili Institute of Physiology, 14 Gotua St., 016, Tbilisi, Georgia.

P1.13 HEMORHEOLOGICAL AND MICROCIRCULATORY DISORDERS DURING SEPTIC SHOCK IN RATS EXPERIMENTS
Tea Sordia, Jemal Tatarishvili, George Mchdelishvili
Microcirculation Research Center, I.Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi, Georgia

THE AGE FACTOR

P1.14 PERSISTENCE OF THE ALTERED POLYMORPHONUCLEAR LEUKOCYTE RHEOLOGICAL AND METABOLIC VARIABLES AFTER 12 MONTHS IN JUVENILE MYOCARDIAL INFARCTION
Gregorio Caimi, Enrico Hoffmann, Egle Incalcatera, Baldassare Canino, Maria Montana, Anna Catania, Rosalia Lo Presti
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo, Italy

P1.15 OXIDANT/ANTIOXIDANT UNBALANCE AND ENDOTHELIAL DYSFUNCTION IN ADVANCING-AGE
Caterina Di Massimo1, Pietro Scarpelli2, Gregorio Caimi3, M.Giuliana Tozzi Ciancarelli2
1 Department of Biomedical Sciences & Technology, Area of Human Physiological Functions, University of L’Aquila, Italy
2 Department of Vascular Surgery, G. Rummo Hospital, Benevento, Italy
3 Department of Internal Medicine, University of Palermo, Italy

P1.16 FETAL AND JUVENILE ANIMAL HEMORHEOLOGY
U. Windberger, R. Plasenzotti, W. Wehrs, A. Goll
Decentralized Biomedical Facilities, Core Unit for Biomedical Research, Medical University of Vienna, Austria

P1.17 MEASUREMENTS OF THE PLASMA-VISCOSITY IN THE OLDEST OLD AGE-GROUP
Ágnes Kovács1, Éva Várady2, Zita Sziksza³, Sándor Imre1
1Department of 3rd Internal Medicine, Research Group of Gerontology - Medical and Health Science Center, University of Debrecen, Hungary
2Laboratory of City Medical Service - Debrecen, Hungary
3Institute of Nuclear Research of the Hungarian Academy of Sciences - Debrecen, Hungary
P1.18 PARTIALLY OPPOSITE HEMORHEOLOGICAL EFFECTS OF AGING AND TRAINING AT MIDDLE AGE.
J Manetta, I Aloulou, E Varlet-Marie and J-F Brun.
Service Central de Physiologie Clinique, Centre d'Exploration et de Réadaptation des Anomalies du Métabolisme Musculaire (CERAMM), CHU Lapeyronie 34295 Montpellier-cédex 5, France

LIPIDS 2

P1.19 EFFECTS OF PHYTOSTEROLS SUPPLIED IN LOW-FAT MILK, IN THE HEMORHEOLOGICAL PARAMETERS AND PLASMA CHOLESTEROL CONCENTRATIONS IN WISTAR RATS
Ana Santos Silva, Carla Saldanha, João Martins e Silva.
1Instituto de Biopatologia Química, Unidade de Biopatologia Vascular, Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa, 1649-028 Lisboa, Portugal.

P1.20 PHYTOSTEROLS IN MILK AS A DEPRESSOR OF PLASMA CHOLESTEROL LEVELS: EXPERIMENTAL EVIDENCE WITH HYPERCHOLESTEROLEMIC PORTUGUESE SUBJECTS
Sonia Gonçalves Abreu, Vasco Maria, Ana Santos Silva, João Martins-Silva and Carla Saldanha.
1Instituto de Biopatologia Química and Unidade de Biopatologia Vascular, Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa, 1649-028 Lisboa, Portugal.
2Instituto de Medicina Preventiva, Faculdade de Medicina de Lisboa, 1649-028 Lisboa, Portugal.

Poster Session 2 - Aula 5
Chairpersons:
From P2.1 to P2.7: T. Kobayashi (Japan), W. H. Reinhart (Switzerland)
From P2.8 to 2.15: I. Tanganelli (Italy), S. Muller (France)
From P2.16 to P2.20: H. Schmid-Schönbein (Germany), I. Tikhomirova (Russia)

AGGREGATION, COAGULATION AND HEMOSTASIS

P2.1 ADRENERGIC AGGREGATION OF ERYTHROCYTES
Roitman Eugene, Dementjeva Inna, Morozov Yury
Russian Research Centre of Surgery RAMS, Moscow, Russia

P2.2 INCIDENCE OF PULMONARY THROMBOEMBOLISM (PTE) AND NEW GUIDELINES FOR PTE PROPHYLAXIS IN JAPAN
Takao Kobayashi, Mashio Nakamura, Masahito Sakuma, Norikazu Yamada, Masato Sakon, Satoru Fujita, Norimasa Seo.
1Department of Family and Child Nursing, and Midwifery, Shinshu University School of Health Sciences, Matsumoto, Japan
2Editorial Committee on Japanese Guideline for Prevention of Venous Thromboembolism

P2.3 THE INFLUENCE OF HEMATOCRIT ON PRIMARY HEMOSTATIS UNDER HIGH SHEAR CONDITIONS IN VITRO
Marco Eugster, Walter H. Reinhart
Department of Internal Medicine, Kantonsspital, CH-7000 Chur, Switzerland

ISCHEMIA

P2.4 FOLIC ACID DOES NOT PROTECT ENDOTHELIAL FUNCTION FROM ISCHEMIA AND REPERFUSION. A HUMAN IN VIVO STUDY.
Giuseppe Di Stolfo, Saverio Dragoni, Tommaso Gori, Silvia Sicuro, John D. Parker, Sandro Forconi.
1Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica, Università degli Studi di Siena, Italy
2Department of Cardiology, Mount Sinai Hospital, Toronto, Canada

P2.5 POSTCONDITIONING DOES NOT LIMIT ENDOTHELIAL DYSFUNCTION INDUCED BY ISCHEMIA AND REPERFUSION IN HUMANS.
Tommaso Gori, Saverio Dragoni, Giuseppe Di Stolfo, Silvia Sicuro, Sandro Forconi
Dipartimento di Medicina Interna Cardiovascolare e Geriatrica, Università degli Studi di Siena, Italy
P2.6 HEMORHEOLOGICAL DISORDERS DURING ISCHEMIC BRAIN INFARCTS WITH AND WITHOUT DIABETES MELLITUS
Nana Momtselidze, Maia Mantskava, George Mchedlishvili
Microcirculation Research Center, I. Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi, Georgia

P2.7 COMPARISON OF ERYTHROCYTE AGGREGABILITY CHANGES DURING THE ISCHEMIC AND HEMORRHAGIC STROKE
Natalie Bolokadze¹, Irma Lobjanidze², Nana Momtselidze³, Roman Shakarishvili² and George Mchedlishvili³
¹ Microcirculation Research Center, I. Beritashvili Institute of Physiology, 14 Gotua Str., 160, Tbilisi, Georgia
² P. Sarajishvili Institute of Neurology, 2a Gudamakari Str., 0192 Tbilisi, Georgia

NEW TECHNOLOGIES

P2.8 DISPOSABLE EKTACYTOMETRY: LASER DIFFRACTION IN A SLIT FLOW
Sehyun Shin¹, Yoonhee Ku¹, Youngllooo Kim¹, and Jangsoo Suh²
¹ School of Mechanical Engineering, Kyungpook National University
² Department of Pathological Physiology, Kyungpook National University

P2.9 FRACTAL ANALYSIS OF MONOCYTES IN DIABETES
Giorgio Bianciardi¹, Italo Tanganelli¹, Dorotea Totagiancaspro¹, Marco Brogi¹, Antonietta Carducci¹, Maria Margherita De Santi²
¹ Dipartimento di Patologia Umana ed Oncologia, Sezione di Anatomia e Istologia Patologica - Università degli Studi di Siena, Italy
² Dipartimento di Scienze Odontostomatologiche, Sezione Diabetologia - Università degli Studi di Siena, Italy.

P2.10 POLYELECTROLYTE MULTILAYER THIN FILMS USED AS NEW TOOL FOR VASCULAR TISSUE ENGINEERING.
Cédric Boura¹, Sylvaine Muller¹, Halima Kerdjoudj³, Pierre Schaaf², Jean Claude Voegel³, Jean Francois Stoltz¹
¹ Mécénat et Ingénierie Cellulaire et Tissulaire, LEMTA-UMR CNRS 7563, Faculté de Médecine, 54505 Vandoeuvre-lès-Nancy, France.
² Institut Charles Sadron (CNRS-ULP), UPR 22 CNRS, 67083 Strasbourg, France
³ INRS U 595, Faculté de Médecine, 67085 Strasbourg, France

P2.11 HEMORHEOLOGICAL DISORDERS IN BRAIN CAPILLARIES (EXPERIMENTAL STUDIES)
Manana Varazashvili, George Mchedlishvili
Microcirculation Research Center, I. Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi, Georgia

P2.12 LOCAL HEMATOCRIT CHANGES DEPENDENT ON THE INTENSITY OF MICROCIRCULATION IN THE HUMAN SKIN
Tinatin Kumsishvili, Manana Varazashvili, George Mchedlishvili.
Microcirculation Research Center, I. Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi, Georgia

P2.13 ERYTHROCYTE STIFFNESS IN DIABETES MELLITUS STUDIED WITH ATOMIC FORCE MICROSCOPE
Maria Formal¹, Małgorzata Lekka², Grażyna Pyka-fościak¹, Kateryna Lebed³, Tomasz Grodzicki¹, Barbara Wizner¹, Jan Styczien²
¹ Department of Internal Medicine and Gerontology, Collegium Medicum, Jagiellonian University, Sniadeckich 10, 31-351 Kraków, Poland.
² The Henryk Niewodniczański Institute of Nuclear Physics, Polish Academy of Sciences, Radzikowskiego 152, 31-342 Kraków, Poland.

P2.14 OSCILLATING VISCOMETER - EVALUATION OF A NEW BEDSIDE TEST
Michael Mark¹, Klaus Häusler², Jürg Dual², Walter H. Reinhart¹
¹ Department of Internal Medicine, Kantonsspital, CH-7000 Chur, Switzerland
² Institute of Mechanical Systems, ETH Zurich, CH-8092 Zurich, Switzerland

P2.15 LASER DIFFRACTOMETRY TECHNIQUE: CLINICAL APPLICATIONS TO VASCULAR PATHOLOGIES
Bibiana Riquelme¹, Patricia Foresto¹,², Mabel D’Arrigo¹,² and Juana Valverde¹,²
¹ Grupo de Óptica Aplicada a la Biología, Instituto de Física Rosario (CONICET-UNR). Argentina
² Departamento de Bioquímica Clínica- Universidad Nacional de Rosario. Argentina.
OXIDATIVE STRESS

P2.16 STRUCTURE-ACTIVITY RELATIONSHIPS FOR THE PROTECTIVE EFFECTS OF SELECTED FLAVONOIDS AGAINST LIPID PEROXIDATION, PROTEIN DEGRADATION AND DEFORMABILITY LOSS OF OXIDATIVELY STRESSED ERYTHROCYTES
Yousif Bilto1, Sana’ Suboh2
1 Zarka University College, Al-Balqa’ Applied University, Zarka P.O.Box (313), Jordan
2 Department of Biological Sciences, Al-Hashemia University, Zarka, Jordan

P2.17 EXERCISE-INDUCED OXIDATIVE STRESS AFFECTS ERYTHROCYTES IN SEDENTARY AND TRAINED YOUNG MEN
Günnur Koçer, Ümit K. Şentürk, Filiz Gündüz, Oktay Kuru, Murat Üyüklü, Özlem Yalçın, Oğuz K. Başkurt
Department of Physiology, School of Medicine – Akdeniz University, Antalya, Turkey

NEW TECHNOLOGIES 2

P2.18 EVALUATION OF A TORSIONAL-VIBRATING TECHNIQUE FOR THE HEMORHEOLOGICAL CHARACTERIZATION
Valter Travagli1, Iacopo Zanardi1, Letizia Boschi2, Vera Turchetti2, Sandro Forconi2
1 Dipartimento Farmaco Chimico Tecnologico – Università degli Studi di Siena, Italy
2 Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica – Università degli Studi di Siena, Italy

P2.19 A NEW ANIMAL MODEL FOR THE STUDY OF THE PERFUSION HOMOGENEITY OF THE CHORIOIDEA OF ALBINO RATS
Kirschkamp Ta, b, c, Haest Cb, Schmid-Schönbein Hb
a IZKF BIOMAT – Interdiciplinary Center for Clinical Research, RWTH Aachen
b Department of Physiology, Aachen University of Technology
c Department of Ophthalmology, University Clinics Aachen

P2.20 PILOT EXPERIMENTS FOR OBJECTIVE CONTROL OF RHEOAPHERETIC TREATMENT AGE RELATED MACULAR DEGENERATION (AMD)
Thomas Kirschkamp, P. Walter, J. Floege and H. Schmid-Schönbein
Departments of Ophthalmology, Internal Medicine and Physiology, RWTH Aachen, D 52074 Aachen

Poster Session 3 - Aula 7
Chairpersons:
From P3.1 to P3.7: A. Vayá (Spain) A. Stepanov (Russian Federation)
From P3.8 to P3.14: E. Varlet-Marie (France), U. Windberger (Austria)
From P3.15 to P3.22: G. Cicco (Italy), P. Moriarty (USA)

MISCELLANEOUS

P3.1 EFFECT OF HYDROXYUREA ON THE DEFORMABILITY OF THE ERYTHROCYTE MEMBRANE IN PATIENTS WITH SICKLE CELL ANAEMIA
George Athanassiou1, Antonia Moutzouri1, George Margaritis1, Aleka Kourakli2
1 Biomedical Engineering Laboratory, University of Patras, Greece 26500
2 Division of Haematology, Department of Internal Medicine, University of Patras Greece

P3.2 BLOOD RHEOLOGY CHANGES IN EXPERIMENTAL RHEUMATOID ARTHRITIS
Alexey Stepanov1, Alexander Spasov1, Natalia Arjkova1, Maria Samokhina1, Ludmila Naumenko2
1 Pharmacology Department – Volgograd State Medical University, Russian Federation

P3.3 THE INFLUENCE OF SEVOFLURAN ANESTHESIA ON THE RAT RED BLOOD CELL DEFORMABILITY
Sami Aydoğân1, Mükerrem Betül Yerer1, Faruk Metin Çomu2, Mustafa Arslan3, Işın Güneş-Ekinci4
1 University of Erciyes, Faculty of Medicine, Department of Physiology, Kayseri, Turkey
2 University of Kırıkkale, Faculty of Medicine, Department of Physiology, Kırıkkale, Turkey
3 University of Gazi, Faculty of Medicine, Department of Anesthesiology, Ankara, Turkey
4 University of Erciyes, Faculty of Medicine, Department of Anesthesiology, Kayseri, Turkey
P3.4 VIDEOCAPILLASCOPY (VCS) EVALUATION IN DIABETIC AND HYPERTENSIVE MICROANGIOPATHY
Marcello Pastorelli1, Fulvio Bruni1, Luca Puccetti1, Alberto Palazzuoli1, Maurizio Acampa1, Federica Biagi1, Moira Servi1, Alessandro Pontani1, Ulrike Beermann1, Fabrizio Diversi1, Anna Laura Pasqui1, Alberto Auteri1.
1Dipartimento di Medicina Clinica e Scienze Immunologiche, Sezione di Medicina Interna, Università degli Studi di Siena, Italy

P3.5 RED BLOOD CELL DEFORMABILITY IN IRON DEFICIENCY ANAEMIA
María Simó1, Amparo Vayá1, Marisa Santaolalía1, José Todoli2, Justo Aznar1
1Hemorheology and Thrombosis Unit, Department of Clinical Pathology La Fe University Hospital, Valencia, Spain
2Internal Medicine Service, La Fe University Hospital, Valencia, Spain

P3.6 REFERENCE VALUES OF PLASMA VISCOSITY IN A SPANISH MEDITERRANEAN POPULATION
Maria Simó1, Amparo Vayá1, Marisa Santaolalía1, Dolores Corella2, Justo Aznar1
1Hemorheology and Thrombosis Unit, Department of Clinical Pathology La Fe University Hospital, Valencia, Spain
2Genetic and Molecular Epidemiology, Unit. School of Medicine, Valencia, Spain

P3.7 DIFFERENT RBC AGGREGATING PROPERTIES OF THE Aa2Bb2G2A2 AND Aa2Bb2G2G′ SUBPOPULATIONS OF HUMAN FIBRINOGEN
Malgorzata Musielak, Jerzy Koscielak
Department of Biochemistry, Institute of Haematology and Blood Transfusion, Warsaw, Poland

P3.8 THE DIAGNOSIS OF TRANSCAPILLARY FLOW DISTURBANCES IN THE LUNGS OF LUNG CANCER
Julia Startseva, Natali Sulimova, Vladimir Cherkasov, Kat Kon, Andre Lysov
State Medical Academy, Oncological Hospital - 614990, Perm, Kuibisheva street, 39 Russia

P3.9 THE FLUIDITY OF BLOOD IN AFRICAN ELEPHANTS (Loxodonta africana)
Ursula Windberger, Roberto Plasenzotti, T. Voracek, Wolfgang Weihs
Decentralized Biomedical Facilities, Core Unit for Biomedical Research, Medical University of Vienna, Austria

P3.10 HEMORHEOLOGICAL DISORDERS DURING THE 1ST AND 2ND TYPES OF DIABETES MELLITUS IN PATIENTS WITH FOOT GANGRENES
Maia Mantskava1, Nana Momtselidze1, Nugzar Pargalava2, George Mchedlishvili1
1Microcirculation Research Center, I.Beritashvili Institute of Physiology, 14 Gotua St., 0160, Tbilisi, Georgia
2Bokhua Center of Angiology and Vascular Surgery, 1 Chachava St., 0159, Tbilisi, Georgia

P3.11 DYNAMIC HEMORHEOLOGICAL PARAMETERS IN BETA THALASSAEMIA MINOR
Pérez, S. M1.; Riquelme, B2.; Acosta, P; Valverde, J1; and Milani, A.1
1Hematology, Faculty of Biochemistry and Pharmacy, Universidad Nacional de Rosario, Argentine
2Physics, Faculty of Biochemistry and Pharmacy, Universidad Nacional de Rosario, Argentine
3Bio-Optic Applied Group, Institute of Physics Rosario (IFIR – CONICET), Rosario, Argentina

P3.12 MIGRATION MECHANISM OF ERYTHROBLASTIC ISLAND IN RAT BONE MARROW
Toshifumi Yokoyama1, Takanori Miki2, Kyong-Youl Lee1, Hiroshi Kitagawa2, Yoshiki Takeuchi1
1Department of Anatomy and Neurobiology, Faculty of Medicine, Kagawa University, Japan
2Department of Life Science, Graduate School of Science and Technology, Kobe University, Japan

P3.13 EFFECTS OF WATER INTAKE ON THE RESPONSES OF HAEMORHEOLOGICAL VARIABLES TO RESISTANCE EXERCISE
Sajad Ahmadizad1,2, Mahmoud Saleh El-Sayed1, Donald Peter MacLaren1
1Research Institute for sports & exercise Sciences, Liverpool John Moores University, Liverpool, UK
2Sport Science Research Centre, Ministry of Sciences, Tehran, Iran

P3.14 IS PLASMA VISCOSITY A PREDICTOR OF OVERTRAINING IN ATHLETES?
E Varlet-Marie and L.E. Brun
Service Central de Physiologie Clinique, Centre d’Exploration et de Réadaptation des Anomalies du Métabolisme Musculaire (CERAMM), CHU Lapeyronie 34295 Montpellier- cèdex 5, France
P3.15 DETERMINANTS OF THE HEMORHEOLOGIC EFFECTS OF LOW INTENSITY ENDURANCE TRAINING IN SEDENTARY PATIENTS SUFFERING FROM THE METABOLIC SYNDROME.
I Aloulou, J-F Brun, and E Varlet-Marie
Service Central de Physiologie Clinique, Centre d’Exploration et de Réadaptation des Anomalies du Métabolisme Musculaire (CERAMM), CHU Lapeyronie 34295 Montpellier-cédex 5, France

P3.16 ALTERED FIBRINOLYTIC RESPONSE IN NIGERIAN LONG DISTANT DRIVERS
Ajayi OI, Abegunde SO, Ezele C
1Physiology Department, Faculty of Basic Medical Sciences, College of Medical Sciences, University of Benin, Benin City, Nigeria
2Haematology Department, Faculty of Basic Medical Sciences, College of Medical Sciences, University of Benin, Benin City, Nigeria

P3.17 HAEMORHEOLOGICAL ALTERATIONS IN NIGERIAN PULMONARY TUBERCULOSIS PATIENTS (PTB)
Onyemairo JC, Ajayi OI, Famodu
Haematology and Physiology Departments, College of Medicine. University of Benin, Benin City, Nigeria

P3.18 USE OF CONFOCAL MICROSCOPY TO STUDY THE KINETICS OF LOW-DENSITY LIPOPROTEIN UPTAKE IN A HUMAN ENDOTHELIAL CELL LINE
Mariama Traoré, Ruijuan Sun, Xiang Qing, Dominique Dumas, Sylvaine Muller, Jean-François Stoltz
1Groupe de Mécanique et Ingénierie Cellulaire et Tissulaire, UMR- CNRS 7563 LEMTA, IFR 111 Bioingénierie, Faculté de Médecine 54505 Vandoœuvre-Lès-Nancy, France
2Research Institute of Clinical Medical Sciences, China-Japan Friendship Hospital, Beijing 100029, China

P3.19 RELATION OF ERYTHROCYTE NITRIC OXIDE WITH HEMORHEOLOGICAL PARAMETERS
F. A. Carvalho, A.V. Maria, J. Guerra, C. Moreira, J. Bráz Nogueira, C. Saldanha
1Instituto de Biopatologia Química, Unidade de Biopatologia Vascular -Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa, 1649-028 Lisboa, Portugal
2Instituto de Medicina Preventiva, Faculdade de Medicina de Lisboa, 1649-028 Lisboa, Portugal
3Serviço de Nefrologia, Hospital de Santa Maria, 1649-028 Lisboa, Portugal
4Serviço de Medicina I, Hospital de Santa Maria, 1649-028 Lisboa, Portugal

P3.20 MICROCIRCULATION AND VENOUS DISEASE HISTORY: ROLE OF SULODEXIDE
Alessandro Apollonio
U.O. Angiologia – Ospedale Belcolle – ASL Viterbo – Italy

P3.21 IN VITRO DEFORMABILITY OF RED BLOOD CELLS FLOWING IN MICROCAPILLARIES IN A GEL MATRIX
Giovanna Tomaiuolo, Vincenzo Sibillo, Luca Lanzaro, Marino Simeone, Stefano Guido, Ciro Rinaldi, Bruno Rotoli
1Dipartimento di Ingegneria chimica, Università degli Studi di Napoli Federico II, Italy
2Dipartimento di Medicina Clinica e Sperimentale - Università degli Studi di Napoli Federico II, Italy

P3.22 ATHEROSCLEROSIS AND HEMORHEOLOGY: CHICKEN OR THE EGG?
Patrick M. Moriarty
Director, Atherosclerosis and LDL Apheresis Center, University of Kansas Medical Center

13.30-14.30
Lunch

14.30-16.30
Symposium S3 – Aula Magna
MYOCARDIAL MICROCIRCULATION
(organized together with the German Society of Clinical Hemorheology)
Chairpersons: F. Jung (Germany), K. Matschke (Germany)

S3.1 THE INFLUENCE OF VARIOUS RADIOGRAPHIC CONTRAST MEDIA ON MYOCARDIAL OXYGEN TENSION
Friedrich Jung, Christoph Mrowietz, Steffi Keller, Ulrich Gerk, Jai-Wun Park, Klaus Matschke
1Department for Clinical Hemostaseology and Transfusion Medicine; University of Saarland, Homburg/Saar, Germany,
2Institute for Heart and Circulation Research, Hoyerswerda, Germany, 3Med. Department, Hospital Hoyerswerda, Hoyerswerda, Germany, 4Heart Center Dresden, Technical University Dresden, Dresden, Germany
S3.2 INFLUENCE OF EXTRA CORPOREAL CIRCULATION ON MYOCARDIAL OXYGEN TENSION: RESULTS OF AN ANIMAL MODEL
Klaus Matschke1, Michael Knaut1, Semts Malte Tugtekin1, Christoph Mrowietz1, Steffi Keller1, Jai-Wun Park2, Friedrich Jung2,3
1Department of Cardiac Surgery, University of Technology Dresden, Dresden, Germany, 2Institute for Heart- and Circulation Research, Hoyerswerda, Germany, 3Department for Clinical Haemostasiology and Transfusion Medicine, University of Saarland, Homburg/Saar, Germany

S3.3 ASSOCIATION BETWEEN MYOCARDIAL OXYGEN TENSION AND HEART RATE
Stefen Pfeiffer1, Klaus Matschke1, Christoph Mrowietz2, Thomas Geisler2, Jai-Wun Park3, Michael Knaut2, Friedrich Jung3,4
1Department of Cardiac Surgery, University of Technology Dresden, Germany, 2Herzzentrum, Universität Erlangen-Nürnberg, Erlangen, Germany, 3Institute for Heart and Circulation Research, Hoyerswerda, Germany, 4Department of Clinical Hemostasiology and Transfusion Medicine, University of Saarland, Homburg/Saar, Germany

S3.4 MYOCARDIAL OXYGEN TENSION DURING FATAL RIGHT HEART FAILURE
Ralph-Peter Franeck1, Klaus Matschke2, Christoph Mrowietz3, Ulrich Gerk3, Bernhard Klosterhalfen4, Michael Knaut2, Friedrich Jung3
1Department of Biomaterials, University of Ulm, Ulm, Germany, 2Department of Cardiac Surgery, University of Technology Dresden, Dresden, Germany, 3Institute for Heart and Circulation Research, Hoyerswerda, Germany, 4Institute of Pathology, Technical University Aachen, Aachen, Germany

S3.5 CHANGES IN PLATELET SURFACE-MARKER EXPRESSION DURING HEART SURGERY - COMPARISON OF TWO DIFFERENT HEART-LUNG-MACHINE SYSTEMS
Thomas Waldow1, Utz Kappert1, Volker Schmidt1, Gunter Schumann1, Oliver Tiebel2, Sybille Bergmann2, Gabriele Siegert2, Michael Knaut1, Klaus Matschke1
1 Department of Cardiac Surgery, University of Technology Dresden, Dresden, Germany, 2 Institute for Laboratory Diagnostics, Technical University of Dresden, University Hospital, Dresden, Germany

S3.6 RED BLOOD CELL AGGREGATION IN SURVIVORS OF ACUTE MYOCARDIAL INFARCTION. INFLUENCE OF PLASMA, ERYTHROCYTE FACTORS AND -455G/A POLYMORPHISM OF THE FIBRINOGEN GENE
Amparo Vayá1, Silvia Breña2, Edelmirio Régamey2, Virtudes Vila2, Vicenta Martínez-Sales2, Esther Zorio3, Dolores Corella4, Justo Aznar1
1 Hemorheology and Thrombosis Unit, Department of Clinical Pathology La Fe University Hospital, Valencia, Spain, 2 Research Centre, La Fe University Hospital, Valencia, Spain, 3 Cardiology Service, La Fe University Hospital, Valencia, Spain, 4 Genetic and Molecular Epidemiology Unit. School of Medicine, University of Valencia, Spain

S3.7 LEUKOCYTE RHEOLOGY IN STABLE AND UNSTABLE CORONARY ARTERY DISEASE
Rupert M. Bauersachs1, Georg Moessmer2, Conrad Pfafferott3
1 Dept. of Vascular Medicine, Klinikum Darmstadt, 84297 Darmstadt, Germany, 2 Division for Clinical Chemistry, Technical University Munich, 81675 München, Germany, 3 I. Medical Department, Klinikum Ingolstadt, 85049 Ingolstadt, Germany

14.30-16.30
Oral Communications Session C2 - Aula 1
RED BLOOD CELLS DEFORMABILITY AND AGGREGATION – PHYSIOLOGY AND PHARMACOLOGY
Chairpersons: H.J. Meiselman (USA), A.V. Meiselman (Russia)

C2.1 THE EFFECTS OF NATTOKINASE, A POTENT PRO-FIBRINOLYTIC ENZYME ON RED BLOOD CELL AGGREGATION AND WHOLE BLOOD VISCOSITY
Eszter Pais1, Tamas Alexy1, Ralph Edward Holsworth, Jr2, Herbert Joel Meiselman1
1 Department of Physiology and Biophysics, Keck School of Medicine, University of Southern California, Los Angeles, CA, 90033, USA, 2 N-ZymeCeuticals Inc, Pagosa Springs, CO, 81147, USA
C2.2 RED BLOOD CELL DEFORMABILITY AND AGGREGATION BEHAVIOUR IN DIFFERENT ANIMAL SPECIES
Roberto Plasenzotti1, Birgit Stoiber1, Martin Posch2, Ursula Windberger1
1 Division for Biomedical Research, Medical University of Vienna
2 Institute of Medical Statistics, Medical University of Vienna, Austria

C2.3 THE IMPORTANCE OF CIRCADIAN RHYTHM ALTERATIONS IN ERYTHROCYTE DEFORMABILITY
M. Betül Yerer1, Sami Aydoğăn1
1University of Erciyes, Faculty of Medicine, Department of Physiology, 38039, Kayseri, TURKEY

C2.4 THE RED BLOOD CELL SURFACE ACETYLCHOLINESTERASE SUCH AS AN HEMORHEOLOGICAL PATTERN DURING GLAUCOMA TREATMENT.
Giuseppe Cicco1, Michele Vetrugno 1-2, Massimiliano Pennetta 2, Maria Teresa Rotelli1-3, Carlo Sborgia1-2, Vincenzo Memet1-3, Luigi Nitti1.
1 C.E.M.O.T. - Centro Ricerche in Emoreologia e Microcircolazione, University of Bari – Italy, 2 Dip. di Oftalmologia ed ORL University of Bari – Italy, 3 D.E.T.O. - Dip. Emergenza e Trapianti d’Organo - University of Bari - Italy.

C2.5 SELECTIVE RESPONSE OF THE DEGREE OF RBC AGGREGATION TO THE ACTION OF THE CATECHOLAMINES: EFFECT OF ABO BLOOD GROUPS
Irina Tikhomirova
Anatomy and Physiology Department, Yaroslav State Pedagogical University, Russia

C2.6 INHIBITING AND STIMULATING EFFECTS OF SOME DRUGS ON RED BLOOD CELL AGGREGATION
Muravyov A.V1, Yakusevich V.V2, Choporov S.V3, Muravyov A.A3
1 Dept. Medicine & Biology of Pedagogical University. Yaroslavl, Russia
2 Medical Academy, Yaroslavl, Russia

C2.7 EXERCISE, RED CELLS AND BLOOD DOPING; A CONCLUSIVE ROLE FOR LORCA?
Max R. Hardeman
Laboratory for Clinical Hemorheology, Department of Physiology, Academic Medical Center, University of Amsterdam, 1105 AZ Amsterdam, the Netherlands

C2.8 IMPROVEMENT OF THE BLOOD RHEOLOGY PROPERTIES IN EXPERIMENTAL DIABETES BY MIDAZOBENZIMIDAZOLE DERIVATIVE
Alexander Spasov1, Alexey Stepanov1, Natali Arijkova1, Maria Samokhina2, Ludmila Naumenko1, Vitalij Kotov1, Tatjana Goncharova1, Darya Malczeva1, Vera Anisimova2
1 Pharmacology Department – Volgograd State Medical University, Russian Federation
2 Rostov-on-Don University, Russian Federation

16.30-17.00
Break

17.00-19.00
Symposium S4 – Aula Magna
Hemorheological aspects in human diseases
(organized together with the “Groupe Français d’Hémorhéologie Clinique”)
Chairpersons: C. Le Dévéhat (France), M. R. Boisseau (France)

S4.1 POLYMORPHONUCLEAR LEUKOCYTE INTEGRIN PROFILE IN DIABETES MELLITUS AT BASELINE AND AFTER IN VITRO ACTIVATION
Gregorio Caimi, Rosalia Lo Presti.
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo, Italy

S4.2 INFLUENCE OF LIPIDS AND OBESITY ON HEMORHEOLOGICAL PARAMETERS IN PATIENTS WITH DEEP VEIN THROMBOSIS
Amparo Vayá1, Yolanda Mira1, Fernando Ferrando1, Cristina Falcó1, Dolores Corella2, Justo Aznar2
1Hemorheology and Thrombosis Unit, Department of Clinical Pathology, La Fe University Hospital, Valencia, Spain
2Genetic and Molecular Epidemiology Unit. School of Medicine, Valencia, Spain
S4.3 INCREASED ADHESION OF ERYTHROCYTES FROM PATIENTS WITH POLYCYTHEMIA VERA IS MEDIATED BY Lu/B-CAM


1INTS, 2UMR 665, 3 Paris 7, Paris, France

S4.4 RED BLOOD CELL AGGREGATION AS AN INDEX OF METABOLIC BALANCE

Muravyov A.V, Yakushech V.V, Choropev S.V, Muravyov A.A.

1 Dept. Medicine & Biology of Pedagogical University, Yaroslavl, Russia
2 Medical Academy, Yaroslavl, Russia

S4.5 EFFECT OF ESPA-LIPON ON MICRORHEOLOGICAL PROPERTIES OF RED BLOOD CELLS IN DIABETIC PATIENTS

Aleksandr Petrochenko, Andrey Kabanov, Vladislav Simonov, Artyom Borbat

Yaroslavl State Medical Academy

S4.6 THE HEMORHEOLOGICAL ASPECTS OF THE METABOLIC SYNDROME ARE A COMBINATION OF SEPARATE EFFECTS OF INSULIN RESISTANCE, HYPERINSULINEMIA AND ADIPOSITY

JF Brun, I Aloulou and E Varlet-Marie

1Service Central de Physiologie Clinique, Centre d’Exploration et de Réadaptation des Anomalies du Métabolisme Musculaire (CERAMM), CHU Lapeyronie 34295 Montpellier-cédex 5, France

17.00-19.00

Oral Communication Session C3 – Aula 1

HEMORHEOLOGY - PHYSIOLOGY AND PATHOLOGY

Chairpersons: A.A. Melnikov (Russia), S. B. Solerte (Italy)

C3.1 NATURAL ANTICOAGULANTS ARE POSITIVELY CORRELATED TO PLASMA VISCOSITY IN ATHLETES

Andrey A. Melnikov, Alexander D. Vikulov, Svetlana V. BAGRakova, Andrey A. Baranov

State Pedagogical University. Respublikanskay 108. Yaroslavl. 150000. Russia

C3.2 POLYMORPHONUCLEAR LEUKOCYTE INTEGRIN PROFILE IN VASCULAR ATHEROSCLEROTIC DISEASE WITH AND WITHOUT TYPE 2 DIABETES MELLITUS

Rosalia Lo Presti, Baldassare Canino, Caterina Carollo, Maria Montana, Eleonora Ferrera, Filippo Ferrara, Gregorio Caimi

Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo, Italy

C3.3 ABOUT THE MECHANISM PRODUCING REVERSIBLE HEMORHEOLOGICAL DISORDERS IN THE BLOOD CAPILLARIES

George Mchedlishvili

1Bertashvili Institute of Physiology, Microcirculation Research Center, Tbilisi, Georgia.

C3.4 HEMORHEOLOGICAL RESPONSE TO PLASMAPHERESIS

Eugene Roitman, Inna Dementeava

Express-Diagnostic Laboratory, Russian Research Centre of Surgery RAMS, Moscow, Russia

C3.5 EFFECT OF PLASMA LIPIDS ON BLOOD VISCOSITY IN PATIENTS WITH CEREBROVASCULAR DISEASE

Irena Velcheva, Nadia Antonova, Valentina Dimitrova, Nikolay Dimitrov, Ivan Ivanov

1Department of Neurology, Medical University, Sofia, Bulgaria
2Institute of Mechanics and Biomechanics, Bulgarian Academy of Sciences, Sofia, Bulgaria

C3.6 MODIFIED ANTIPLATELET ACTIVITY OF ATORVASTATIN IN HYPERCHOLESTEROLEMIC CARRIERS OF LECTIN-LIKE OXIDIZED LOW-DENSITY LIPOPROTEIN RECEPTOR-1 (LOX-1) 3’UTR/T POLYMORPHISM.

Luca Puccetti, Fulvio Bruni, Anna Laura Pasqui, Marcello Pastorelli, Federica Ciani, Michela Cercignani, Alberto Palazzuoli, Alberto Auteri.

1Dipartimento di Medicina Clinica e Scienze Immunologiche, Sezione di Medicina Interna, Centro per Ricerche sull’Aterosclerosi, Università degli Studi di Siena, Italy, 2Unità di Malattie Neurometaboliche, A.O. Meyer Firenze, Italy.
C3.7 ADVANCED GLYCATION AND GLYCO-OXYDATION ALTERS BLOOD RHEOLOGY AND THE SECRETIONS OF NEUROPROTECTIVE GROWTH FACTORS AND NEUROTOXIC CYTOKINES IN ALZHEIMER’S DISEASE
Sebastiano Bruno Solerte\textsuperscript{1}, Annunziata Lapolla\textsuperscript{2}, E. Locatelli\textsuperscript{1}, V. Mansi\textsuperscript{1}, M. Fioravanti\textsuperscript{1}
\textsuperscript{1}Department of Internal Medicine and Geriatrics, University of Pavia; ASP-S.Margherita Institute of Geriatric Rehabilitation, Pavia, Italy
\textsuperscript{2}Department of Medical Sciences and Metabolism, University of Padova, Italy

C3.8 ALTERED HAEMORHEOLOGICAL INDICES IN NIGERIAN GERIATRICS
Ajayi OI\textsuperscript{1}, Famodu AA\textsuperscript{1}, Abegunde SO\textsuperscript{1}, Ojukwu N\textsuperscript{2}.
\textsuperscript{1}Physiology And Haematology Departments, University Of Benin, Benin City, Nigeria
\textsuperscript{2}Haematology Department, Ambrose Alli University, Ekpoma, Nigeria

20.30
Gala Dinner
Wednesday 29

Venue “Centro Didattico del Policlinico”

9.00-10.30
Symposium S5 – Aula Magna

HEMORHEOLOGICAL MEASUREMENTS AND TECHNOLOGY
Chairpersons: Max R. Hardeman (Amsterdam, the Netherlands), Sehyun Shin (Daegu, Korea)

S5.1 DISPOSABLE RBC AGGREGOMETER WITH VIBRATION-INDUCED DISAGGREGATION MECHANISM
Sehyun Shin1, Yunhee Ku1, Juhee Jang1, and Jangsoo Suh2
1School of Mechanical Engineering, Kyungpook National University
2Department of Laboratory Medicine, Kyungpook National University

S5.2 DEFORMABILITY DISTRIBUTION OF RED CELLS AND THEIR ORIENTATION IN SHEAR FLOW FIELD MEASURED WITH THE AUTOMATED RHEOSCOPE AND CELL ANALYZER (ARCA) EQUIPPED WITH LINKAM CSS
M.R. Hardeman1, J.G.G. Dobbe2
1Department of Physiology, 2Department of Medical Technological Development
Academic Medical Center, University of Amsterdam, 1105 AZ, Amsterdam, the Netherlands.

S5.3 GUIDELINES FOR THE STANDARDIZATION IN HEMORHEOLOGICAL STUDIES
Oguz K. Baskurt1, Herbert J. Meiselman2
1Department of Physiology, Akdeniz University Faculty of Medicine, Antalya, Turkey
2Department of Physiology and Biophysics, USC Keck School of Medicine, Los Angeles, CA, USA

S5.4 A MULTIGATE DOPPLER SYSTEM FOR INTEGRATED EVALUATION OF BLOOD FLOW VELOCITY PROFILE AND WALL DISTENSION IN HUMAN LARGE ARTERIES
Carlo Palombo1, Tiziano Morganti2, Francesca Vittone1, Giacomo Bambi2, Michaela Kozaková1, Stefano Ricci2, Carmela Morizzo1, Piero Tortoli2
Dipartimento di Medicina Interna, Università degli Studi di Pisa, Italy
Dipartimento di Elettronica e Telecomunicazioni - Università degli Studi di Firenze, Italy

S5.5 BIOMECHANOPHARMACOLOGY—THE NEW APPROACH FOR STUDYING DRUG ACTION ON INTERVENTION IN ENDOTHELIAL CELL FUNCTIONS
Fulong Liao1, Min Li2
1 Institute of Chinese Materia Medica, China Academy of Traditional Chinese Medicine, Beijing, 100700, China
2 School of Chinese Medicine, Hong Kong Baptist University, Hong Kong

Panel Discussion regarding the Guidelines

9.00-10.30

Oral Communication Session C4 – Aula 1

ATHEROSCLEROSIS, ISCHEMIA AND ISCHEMIC PRECONDITIONING
Chairpersons: T. Gori (Italy), R. del Guercio (Italy)

C4.1 GMP PROTECTS THE ENDOTHELIUM IN THE SETTING OF ISCHEMIA AND REPERFUSION.
Tommaso Gori1, Giuseppe Di Stolfo1, Silvia Sicuro1, Saverio Dragoni1, Giovanni Donati1, John D Parker2, Sandro Forconi1
1Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica, Università degli Studi di Siena, Italy
2Department of Cardiology, Mount Sinai Hospital, Toronto, Canada

C4.2 EFFECTS OF NO PRECONDITIONING ON THE CYTOKINE-INDUCED SURFACE EXPRESSION OF CELL ADHESION PROTEINS IN HUMAN ENDOTHELIAL CELLS
Thomas Waldow, Wolfgang Witt, Elvis Weber, Michael Knaut, Klaus Matschke
Department of Cardiac Surgery, University of Technology Dresden, Dresden, Germany
C4.3 PLATELET AND POLYMORPHONUCLEAR LEUKOCYTE ACTIVATION MARKERS IN JUVENILE MYOCARDIAL INFARCTION
Gregorio Caimi, Enrico Hoffmann, Egle Incalcaterra, Marco Caruso, Maria Montana, Rosalia Lo Presti
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo, Italy

C4.4 CHANGES OF THE MICROCIRCULATION STATE AND THE HEMORHEOLOGY PARAMETERS IN ACUTE CORONARY SYNDROME
Elena Konstantinova, Natalia Tsapaeva, Tatiyana Tolstaya, Svetlana Zolotukhina, Elena Mironova, Lilia Ivanova
Belarussian Centre “Cardiology”, Minsk, Belarus

C4.5 RESPONSES OF PLATELET ACTIVATION AND FUNCTION TO A SINGLE BOUT OF RESISTANCE EXERCISE
Sajad Ahmadizad, Mahmoud Saleh El-Sayed, Donald Peter MacLaren
1 Research Institute for sports & exercise Sciences, Liverpool John Moores University, Liverpool, UK
2 Sport Science Research Centre, Ministry of Sciences, Tehran, Iran

C4.6 NON-HEMODILUTING DEXTRANE IN CRITICAL LIMB ISCHEMIA: MICROCIRCULATION AND HEMORRHEOLOGY
Giovanni Ragozzino, Raffaele del Guercio, Luca del Guercio
Department of Vascular Surgery and Angiology. University Federico II, Naples, ITALY

10.30-11.00
International Medical Consensus Meeting – Aula Magna
Chairpersons: M.R. Boisseau, C. Allegra
VENO-ACTIVE DRUGS IN THE MANAGEMENT OF CHRONIC VENOUS DISEASE. AN INTERNATIONAL CLINICAL CONSENSUS
Albert A Ramelet, Claudio Allegra, Michel R Boisseau, Patrick H Carpentier, Sandro Forconi, Kurt Jäger, Andrew Nicolaides,
1 Place Benjamin Constant 2, 1003 Lausanne, Switzerland

11.00-11.30
Break

11.30-12.00
Lecture L5 – Aula Magna
Chairperson: C. Le Dévéhat (France)
CUTANEOUS microCIRCULATION IN PATIENTS WITH CORONARY ARTERY DISEASE AND ERECTILE DYSFUNCTION
J.-W. Park, M. Hien, C. Mrowietz, A. Creutziger, H. F. Jung
1 Cardiology Division, Hoyerswerda Hospital, Germany, 2 Institute for Heart and Circulation Research, Hoyerswerda, Germany, 3 Urological Practice, Hoyerswerda, Germany

12.00
Closing Ceremony
1° Congresso Nazionale della Società Italiana
di Emoreologia Clinica e Microcircolazione (S.I.E.C.M.)

28 Giugno 2005 - Siena

PROGRAMMA

Martedì 28

Sede “Centro Didattico del Policlinico”

8.00-8.30
Registrazione

8.30-9.00
Inaugurazione del Congresso – Aula 2

9.00-10.30
I Sessione di Comunicazioni – Aula 2

ISCHEMIA

Moderatori: F. Laghi Pasini (Siena), R. Del Guercio (Napoli)

C1.1 CARDIOPATIA ISCHEMICA CRONICA: PATTERN INTEGRINICO DEI LEUCOCITI
POLIMORFONUCLEATI DOPO ATTIVAZIONE IN VITRO E DURANTE TEST ERGOMETRICO
Gregorio Caimi, Baldassare Canino, Gabriella Amodeo, Vincenzo Calandrino, Maria Montana, Adele Romano, Rosalia Lo Presti
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo

C1.2 MONITORAGGIO DELLE DETERMINANTI EMOREOLOGICHE NELL’INFARTO MIOCARDICO
GIOVANILE
Gregorio Caimi, Enrico Hoffmann, Maria Montana, Teresa D’Amico, Maria Flavia Casciolo, Anna Catania, Rosalia Lo Presti
Dipartimento di Medicina Interna, Malattie Cardiovascolari e Nefrourologiche - Università degli Studi di Palermo.

C1.3 LA SINDROME DEL DITO BLU : QUANDO È ISCHEMIA CRITICA ?
Pierluigi Mollo - Roberta Romano - Federica Pomella

C1.4 ISCHEMIA CRITICA D’ARTO NON RIVASCULARIZZABILE - RISULTATI DELLA STIMOLAZIONE
CORDALE SPINALE (S. C. S.)

C1.5 L’ISCHEMIA E RIPERFUSIONE NON INDUCE DISFUNZIONE ENDOTELIALE A LIVELLO DEL
MICROCIRCOLO CUTANEO: CONFRONTO IN VIVO IN UOMINI CON IL CIRCOLO ARTERIOSO DI
CONDUTTANZA
Giuseppe Di Stolfo, Silvia Sicuro, Saverio Dragoni, Tommaso Gori, Sandro Forconi
Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica, Università degli Studi di Siena, Italy

10.30-11.00
Lettura L1 – Aula 2

EMOREOLOGIA ED AFERESI
Gregorio Caimi (Palermo)
Presiede: A. Strano (Roma)
11.00-11.30

**Intervallo**

11.30-13.00

**Il Sessione di Comunicazioni – Aula 2**

**MICROCIRCOLO ED ENDOTELIO**

Moderatori: A. Carlizza (Roma), R. Cappelli (Siena)

C2.1 LO STUDIO DELLA FLOWMOTION CUTANEA MEDIANTE ANALISI SPETTRALE DEL SEGNALE LASER DOPPLER COME METODO DI VALUTAZIONE DEI MECCANISMI DI REGOLAZIONE LOCALE DEL MICROCIRCOLO CUTANEO

Rossi M,
Dipartimento di Medicina Interne, Università di Pisa

C2.2 STUDIO DELLA FLOWMOTION CUTANEA IN RISPOSTA ALL’ESERCIZIO ACUTO IN SOGGETTI ALLENATI E SEDENTARI

U.O. e Scuola di Specializzazione in Medicina dello Sport, Dipartimento di Medicina Interne, Università di Pisa

C2.3 STRESS OSSIDATIVO E REATTIVITÀ PIASTRINICA IN MENOPAUSA

Caterina Di Massimo¹, Gaspare Carta², M.Giuliana Tozzi Ciancarelli³
¹Dipartimento di Scienze e Tecniche Biomediche, Area di Fisiologia Umana, Università degli Studi di L’Aquila, Italy
²Dipartimento di Scienze Chirurgiche, Università degli Studi di L’Aquila, Italy

C2.4 IL GENE eNOS INFLUENZA LA VISCOSITÀ EMATICA E LA DEFORMABILITÀ DEI GLOBULI ROSSI: RUOLO DEI POLIMORFISMI T-786C, G894T E 4a/4b DEL GENE eNOS

Lucia Mannini¹, Cinzia Fatini¹, Elena Sticchi¹, Emanuele Cecchi¹, Isabella Iarì¹, Maria Costanzo¹, Emanuela Leprini⁰, Paolo Pagnini⁰, Gian Franco Gensini¹, Domenico Prisco¹, Rosanna Abbate¹
¹Dipartimento di Area Critica Medico-Chirurgica, Centro Trombosi, Azienda Ospedaliero-Universitaria Careggi, Firenze, Italy

C2.5 EFFETTI DEL NEBIVOLOLO SUL MICROCIRCOLO SUPERFICIALE IN PAZIENTI VACULOPATICI IPERTESI NON DIABETICI. STUDIO VIDEOCAPILLAROSCOPICO (VCS)

Marcello Pastorelli¹, Fulvio Brunì¹, Luca Puccetti¹, Anna Laura Pasqui¹, Maurizio Acampa¹, Alberto Palazzuoli¹, Federica Biagi¹, Moira Servi¹, Alessandro Pontani¹, Fabrizio Diversi¹, Ulrike Beermann¹, Agnese Costa¹, Alberto Auteri¹.
¹Dipartimento di Medicina Clinica e Scienze Immunologiche Applicate; Sezione di Medicina Interne

C2.6 ALTERATA DEFORMABILITÀ ERITROCITARIA ASSOCIATA AD UNA RIDOTTA RISPOSTA PIASTRINICA A FARMACI ANTIAGGREGANTI IN PAZIENTI CON SINDROMI CORONARICHE ACUTE.

Lucia Mannini, Rossella Marcucci, Rita Paniccia, Emilia Antonucci, Cristina Giglioli, Serafina Valente, Sandra Fedi, Anna Maria Gori, Domenico Prisco, Gian Franco Gensini, Rosanna Abbate
Dipartimento Area Critica Medico-Chirurgica, Centro Trombosi, Università degli Studi di Firenze

13.00-13.30

**Lettura L2 – Aula 2**

**MICROCIRCULATION INVOLVEMENT IN CVI**

Claudio Allegra (Roma)
Presiede: S. Forconi (Siena)

13.30-14.30

**Lunch**
14.30-15.30
*Assemblea soci SIECM – Aula 2*

15.30
*Apertura seggio elettorale – Aula 6*

15.30-16.45
*Simposio – Aula 2*
**Aspetti microcirculatori nell’insufficienza arteriosa periferica**
Moderatori: F. Pitzus (Cagliari), R. Nuti (Siena)

**S1.1 MICROEMODINAMICA NELLA ARTERIOPATIA OBLITERANTE PERIFERICA AL II STADIO**
Marco Rossi
*Dipartimento di Medicina Interna, Università di Pisa*

**S1.2 ASPETTI ENDOTELIALI ED EMOREOLOGICI NELL’ARTERIOPATIA OBLITERANTE PERIFERICA**
V. Turchetti, L. Boschi, D. Coppola, VMA. Mastronuzzi, M.C. Leoni, S. Forconi
*Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica - Università degli Studi di Siena*

**S1.3 ASPETTI EMOGASANALITICI TRANSCUTANEI NELL’ISCHEMIA CRITICA**
Anita Carlizza, Claudio Allegra
*U.O.C. Angiologia, Azienda Ospedaliera S.Giovanni-Addolorata, Roma (Direttore: Prof. C. Allegra)*

**S1.4 FLOWMOTION IN CRITICAL LIMB ISCHEMIA AND IN VENOUS ULCERS**
Romeo Martini
*U.O. Angiologia - Azienda Ospedale Università di Padova*

16.45-17.15
*Intervallo*

17.15-17.45
*Lettura L3 – Aula 2*
**LA MICROCIRCOLAZIONE, DAL LABORATORIO ALLA CLINICA**
G.M. Andreozzi (Padova)
Presiede: C. Allegra (Roma)

18.00
*Chiusura del seggio elettorale – Aula 6*

17.45-19.00
*III Sessione di Comunicazioni – Aula 2*
**MICROCIRCOLO**
Moderatori: M. G. Tozzi Ciancarelli (L’Aquila), A.R. Todini (Roma)

**C3.1 STUDIO DEI MECCANISMI DELL’ATTIVITÀ VASODILATATRICE DELL’INSULINA MEDIANTE ESAME DELLA FLOWMOTION CUTANEA IN RISPOSTA ALLA IONTOFORESI DI INSULINA**
Rossi M, Maurizio S, Di Stefano D.
*Dipartimento di Medicina Interna, Università di Pisa*
C3.2 VIDEOCAPILLAROSCOPIA COMPUTERIZZATA. STUDIO MORFOLOGICO DELLA MICROCIRCOLAZIONE : ESPERIENZE DEL C.E.M.O.T. - BARI
Giuseppe Cicco¹, Vincenzo Memeo¹-², Luigi Nitti³
1 C.E.M.O.T. - Centro Ricerche in Emoreologia e Microcircolazione, Università degli Studi di Bari.

C3.3 LE MODIFICAZIONI DELLA UNITÀ MICROCIRCOLATORIA NELLA PATOGENESI DELL’ULCERA FLEBOSTATICA
Pierluigi Mollo - Roberta Romano - Federica Pomella

C3.4 EMOREOLOGIA E FIBRILLAZIONE ATRIALE: UN MARKER NUOVO PER LE COMPLICANZE EMBOLICHE?
Lucia Mannini, Emanuele Cecchi, Maria Costanzo, Daniela Poli, Gian Franco Gensini, Rosanna Abbate, Domenico Prisco
Dipartimento di Area Critica Medico-Chirurgica, Centro Trombosi, Azienda Ospedaliero-Universitaria Careggi, Firenze, Italy

C3.5 LA VISCOSITA’ EMATICA CAPILLARE NELLA MICROCRCOLAZIONE
Alvise Cortinovis, Alda Crippa ¹, Maurizio Corti ²
¹ Dipartimento di Medicina Interna e Terapia Medica, Istituto per lo studio delle Malattie vascolari e metaboliche, Università degli Studi di Pavia. Clinica Medica II, IRCCS Policlinico S. Matteo
² Dipartimento di Fisica “A: Volta”, INFM Unità di ricerca di Pavia

19.00-19.15
Proclamazione dei risultati elettorali – Aula 2

19.15
Cerimonia di chiusura – Aula 2
CONFERENCE VENUES

Palazzo del Rettorato - Banchi di Sotto, 55
The building of San Vigilio, seat of the Rectorate of the University of Siena since 1816, is the result of the unification of several pre-existing constructions erected on the site of the medieval city walls.
In the XVI century the main parts of the complex were home to the Jesuit College; in the XVII century renovations began to transform the buildings into a college, leaving them quite similar to the present condition.
In the same period the adjacent church of San Vigilio acquired the Baroque form that we can admire today.
Over the following centuries a great number of artists and architects worked in this palace, such as Bernardino Mei, a famous XVII century Sienese painter.
One of the most important tasks of renovation, the Aula Magna, was carried out in 1825 by the famous Sienese neoclassicist architect Agostino Fantastici.
Inside the Rectorate two valuable paintings can be admired: one by Ambrogio Lorenzetti (1319-1348), representing the ancient Indian city of Thanah, which was taken from the church of San Francesco; the other, a lunette with a Madonna and Saints, by Martino di Bartolomeo (1389-1435).

Centro Didattico del Policlinico Le Scotte
The story of Siena’s hospital is steeped in tradition and history. Its historical, cultural and scientific heritage is related to the old “Spedale Santa Maria della Scala”, the first mentions of which date back to 1090. Over the centuries, the old hospital, located in front of the Cathedral, gradually became unable to meet the city’s needs. By 1905 an aristocratic Sienese scholar of art and history, Fabio Bargagli Petrucci, had proposed moving the hospital to a new site, but it wasn’t until the early 1950’s that the University of Siena really promoted the idea of building a new hospital. Since then the hospital has expanded more and more to become one of the largest and most advanced centres in central Italy.

How reach the Centro Didattico del Policlinico

By bus
no. 3-10-17-77
Every ten minutes from/to the town centre.
From visitors’ entrance follow the grey line to the Centro Didattico elevator (1st floor)

By car
Follow signs to the hospital (Policlinico) and Centro Didattico del Policlinico
Parking
Limited number of free parking places. Pay parking available (€ 2,00 daily fare)

Taxi:
Tel. 0577-49222
GENERAL INFORMATION

On-site registration
On-site registration opens on Monday 27 (8.00 am) at the Centro Didattico del Policlinico le Scotte

Badges
Participants are kindly requested to wear their badges during all Conference activities and social events

Certificate of Attendance
A certificate of attendance will be available on request at the Registration desk

Conference Language
The official language of the 13th Conference of the E.S.C.H. will be English
La lingua ufficiale del Congresso Nazionale della S.I.E.C.M. sarà l’italiano

Oral presentation
PLENARY LECTURES will be allotted 30’ for presentation and will not be followed by discussion
ORAL COMMUNICATIONS AT SYMPOSIA will be allotted 20’ for presentation and discussion under the supervision of the chairpersons
ORAL COMMUNICATIONS will be allotted 15’ for presentation and discussion under the supervision of the chairpersons
Only Windows® Powerpoint® presentations will be accepted; files will have to be handed to technical staff before the beginning of the session.
Slides or overhead transparencies will not be accepted.

Poster display
Posters will remain attached from Monday the 27th at 9.00 am until the end of the Conference and will be presented in moderated sessions. Maximum poster size is 70cm (wide) by 100cm (high).
POSTERS will be allotted 5’ for presentation and will be discussed under the supervision of the chairpersons.

Proceedings
The Selected Proceedings will be published after the Conference on a Special Issue of Clinical Hemorheology and Microcirculation. Authors should prepare their manuscripts according to the “Instructions to Author(s)” available in the IOS Press web site (http://www.iospress.nl/html/13860291_ita.html) and submit them to the Scientific Secretary during the Conference. The suggested length for the manuscripts is: up to 10 printed pages for lectures, up to 6 pages for communications at symposia, up to 3 pages for oral communications and posters. All manuscripts will be peer reviewed. The organizers of the symposia will act as guest-editors and will submit the contributions presented during the symposia after their revision.
INFORMAZIONI GENERALI
RELATIVE AL 1° CONGRESSO DELLA S.I.E.C.M.

Crediti ECM
La Commissione Nazionale per la formazione continua del Ministero della Salute ha attribuito all’evento 5 crediti ECM

Convocazione Assemblea Soci S.I.E.C.M.
L’Assemblea Ordinaria dei Soci della Società Italiana di Emoreologia Clinica e Microcircolazione avrà luogo, in prima convocazione, il giorno 28 Giugno 2005 alle ore 8.00 presso l’Aula 2 del Centro Didattico del Policlinico Santa Maria alle Scotte, Siena e, in seconda convocazione, il giorno 28 Giugno 2005 alle ore 14.30 presso l’Aula 2 del Centro Didattico del Policlinico Santa Maria alle Scotte, Siena, con il seguente ordine del giorno:

1. Comunicazioni del Presidente
2. Elezioni del Consiglio Direttivo della Società. Nomina della Commissione Elettorale
3. Relazione finanziaria del Tesoriere
4. Varie ed eventuali

Il presente annuncio ha valore di Convocazione

Al termine dell’Assemblea dei Soci si terranno le elezioni per eleggere il Presidente ed il Consiglio Direttivo della Società. Il Saggio elettorale si aprirà alle ore 15.30 in Aula 6 e si chiederà alle 18.00. La proclamazione dei risultati elettorali avrà luogo in Aula 2 alle ore 19.00

Si ricorda che potranno prendere parte all’Assemblea e alle elezioni per il rinnovo delle cariche sociali solo i soci in regola con il pagamento della quota associativa che potrà comunque essere versata in sede congressuale.

Il Presidente ed il Comitato Scientifico desiderano ringraziare la Dott.ssa Andreina Mancini e Sonia Ruggeri della G.C. Congressi (G.C. Congressi s.r.l. - Via P. Borsieri 12 - 00195 Roma - tel. 06.3729466 - fax. 06.37352337) per il supporto organizzativo fornito alla Società e al Congresso.
CONTACTS

PRESIDENT OF THE CONFERENCE:
Sandro Forconi
E-mail: forconi@unisi.it

SCIENTIFIC SECRETARIAT:
Letizia Boschi, Pier Leopoldo Capecchi, Roberto Cappelli, Carlo Fiorenzani,
Tommaso Gori, Franco Laghi Pasini, Luca Trabalzini, Vera Turchetti
Dipartimento di Medicina Interna, Cardiovascolare e Geriatrica,
Università degli Studi di Siena
Policlinico Santa Maria alle Scotte, Viale Bracci - 53100 Siena, Italy
E-mail: images@unisi.it
Phone:+39 0577 233319
Fax:+39 0577 233318

ORGANIZING SECRETARIAT:
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SOCIAL EVENTS

**Sunday 26**
16.00 - Opening Ceremony - Aula Magna del Rettorato
18.30 - Welcome Reception in the “Cortile del Rettorato”

**Monday 27**
15.00 - Bus departure from the Hotel Executive and from the Hotel Jolly to Pienza and the Val d’Orcia
18.30 – Tasting of typical Tuscan dishes

**Tuesday 28**
20.30 - Social Dinner at the “Certosa di Pontignano”

PIENZA AND THE VAL D’ORCIA

The landscape of the Val d’Orcia is part of the agricultural hinterland of Siena, re-drawn and developed when it was integrated in the territory of the city-state in the 14th and 15th centuries to reflect an idealized model of good governance and to create an aesthetically pleasing picture. The landscape’s distinctive aesthetics, flat chalk plains out of which rise almost conical hills with fortified settlements on top, inspired many artists. Their images have come to exemplify the beauty of well-managed Renaissance agricultural landscapes. The inscription covers: an agrarian and pastoral landscape reflecting innovative land management systems; towns and villages; farmhouses; and the Roman Via Francigena and its associated abbeys, inns, shrines, bridges.

In the centre of the Val d’Orcia there is Pienza: it was in this wonderful Tuscan town that Renaissance town-planning concepts were first put into practice after Pope Pius II decided, in 1459, to transform the look of his birthplace. He chose the architect Bernardo Rossellino, who applied the principles of his mentor, Leon Battista Alberti. This new vision of urban space was realized in the superb square known as Piazza Pio II and the buildings around it: the Piccolomini Palace, the Borgia Palace and the cathedral with its pure Renaissance exterior and an interior in the late Gothic style of south German churches.

THE “CERTOSA DI PONTIGNANO”

In 1341 Bindo di Falcone, a gentleman from Siena who had become rich through trade with the Papal States, bought land and goods in the small town of Pontignano, and gave them as a donation to a Carthusian monk from Aquitaine, brother Amerigo, so he could establish a monastery dedicated to Saint Peter. The Carthusian Order, at the time, was expanding throughout Italy, and Tuscany was one of their favourite locations. Several monasteries were set up: first among these, the monastery at Maggiano built in 1314 on orders of Cardinal Riccardo Petroni, cousin of Bindo di Falcone. Later on, two Carthusian monasteries (or “Certose”) were built: the one at Belriguardo, with the support of the banker Niccolò Cinughi, and the one at Pontignano. On August 8, 1343, the Bishop granted permission to Bindo di Falcone - who had already overseen the work at Maggiano as executor of the will of his cousin the Cardinal - to set up the Certosa. The plan provided for building a church, with cloisters, cells and service buildings which could “House
twelve fathers, twelve lay brothers and their servants”. Despite the interesting project, the Carthusians seemed unwilling to go and live in Pontignano: Messer Bindo therefore decided to pay Pope Clement VI a rich indulgence for ten monks who - by going to live and die in the new Certosa - would have their sins forgiven. The last to be built, the Certosa of Pontignano is the only one to preserve its original atmosphere as an oasis of peace today. The other two, Maggiano and Belriguardo, were in fact put to uses which were different from the original ones. The overall architectural layout was naturally affected by work undertaken through the ages. The basic module is the traditional one of Carthusian monasteries, subdivided into three parts: the area set aside for the monks, with their cells laid out around a large cloister; the area housing the lay brothers; and, finally, the area set aside for the church, the chapter and the refectory around the cloister, the real heart of the whole complex. The church - the first building to be built - preserves certain 14th century features, such as the thick surrounding walls and the arcades. The Certosa was built in the open country, on the border between the states of Florence and Siena; it needed to mark off its own borders and to be defended against raiding mercenaries. In 1385 the state of Siena, acknowledging the importance of the settlement, had strong walls built around it. In the same year, Stefano Maconi, Saint Catherine’s favourite disciple, was appointed prior of Pontignano. It was probably he who obtained the relic of the ring finger of the Saint - the chapel, later painted with frescoes by Nasini, was built to host it. The Certosa also enjoyed the protection of Gian Galeazzo Visconti due to the merits acquired by a monk from Pontignano who oversaw a large part of the building work in the Certosa of Pavia. Its walls notwithstanding, the Certosa was violated and sacked during the war between Siena and Florence. In 1449, a band of Florentines broke in, and during the famous “Congiura dei Pazzi”, the monastery was set on fire. Immediately after it was again damaged: in 1554, German and Spanish militias sacked the monastery. During the late 15th Century, the building received considerable impulse from Renaissance elements. These are mainly visible in the cloister along the long side of the church: its square layout, with five spans per side and sail vaults held up by small columns with Ionian capitals show clear features of equilibrium and sobriety. Other minor work was done at the end of the 17th Century, when the rooms along the eastern side of the monastery were refurbished: the six Chapels built previously were united in the so called “Cappellone” or big chapel. In 1703, the Chapel of Saint Agnes was built: its door lies a the end of the eastern arm of the big cloister. The Carthusians who had devoted so much care to Pontignano, making it an oasis of peace, left the Certosa at the end of the 18th Century. A document dated July 16, 1785, transferred Pontignano to the monks of Camaldoli, who however were forced to leave it when the convents were suppressed under Napoleon. The parish of San Martino a Cellole was then moved to Pontignano; the buildings, except those where the parish priest lived, were purchased - together with the old monks’ dwellings and some land - by the Masotti family, who sold them in 1886 to the Cecchins, who in their turn passed them on in 1919 to the Sergardis. In 1939, the area became the property of the Certosa di Pontignano company, one of whose shareholders was professor Mario Bracci. In the same period, the future Judge of the Constitutional Court had the villa and the small middle cloister repaired at his own expense. Throughout the war period, Pontignano was a secure place of refuge for Jews and the victims of political persecution. In 1959, the complex was purchased by the University of Siena, who then turned it into a university residence. The extensive work undertaken during the Renaissance and later have not altered the harmony which was the foundation of the life of the Carthusians: the equilibrium between man, faith and nature. The Chianti countryide shows its softer aspects here; the hills accompany the traveller towards Siena, while vineyards and olives
surround the Certosa and a carefully tended countryside penetrates into it, turning into precious gardens. There is no separation between inside and outside; between the environment and its harmonious architectural structure and the works of art which enrich it. It is especially in the churches that one can find the most important evidence of this. The first church, built with a single nave and subdivided into three spans covered with sail vaults, contains a masonry wall with an opening in the middle which used to divide the space into two areas of different width: one for the monks, the other and smaller one for the lay brothers. This was largely the work of the Florentine painter Bernardino Potetti, who had also worked for the Carthusians at Calci and Florence according the canons on painting laid down by the Counter-Reformation. Samples of his work are to be found on the walls with the Carthusian stories of Saint Bruno and Saint Peter, on the canvas and the decorations of the main altar.

Together with the choir stall by the carpenter Domenico Atticciati, the decorations create a kind of “manifest spot”. The rest of the decorations were completed by Orazio Porta, Stefano Cassini and painters from Siena whose style clearly comes from that of Francesco Vanni and Alessandro Casolani. Potetti was also the author of the fresco with the “Last Supper” in the refectory (1596), and a fresco with the “Samaritan at the Well” in one of the monks’ cells as well as a lunette with the “Death of Saint Bruno” over a door facing the cemetery. In the “Cappellone”, next to the church, the painting on the main altar is attributed to Francesco Vanni, while the decorations and frescoes on the walls are attributed to Nicola Nasini and his son Apollonio. In the chapel to the right of the small church, the altar shows the “Lamentation of Christ dead and the Saints”, a work which has recently been associated with the name of Cristofano Rustici, as further evidence of the work carried out here by artists of the Siena school.
THE CITY OF SIENA

HISTORICAL NOTES

Legend says that Siena was founded by Senio, the son of Remus, who was one of the founders of Rome. Several columns are to be found dotted around the city centre portraying at their tops a she-wolf suckling twin brothers (Romulus and Remus), recalling Siena’s link with this legend. Other historians claim that the city’s name originates from that of an Etruscan family: Saina.

It is certain that Siena began to develop in the Middle Age and spread over three hills, later known as the “Terzi” (thirds). The city is shaped like an upside-down Y, with the old “Via Francigena”, which connected Rome and Paris, running through it.

Siena had its greatest period of prosperity in the XIII-XIV centuries, when it was an independent republic and grew to become one of the European capitals of commerce and banking (the latter still being the city’s most important activity).

In this period Sienese art flourished and many famous painters, such as Duccio di Boninsegna and Simone Martini, established schools of painting.

This era was also characterised by strong rivalry, especially with neighbouring Florence. One of the most memorable episodes in this struggle was the Battle of Monteaperti (1260), in which the Sienese Ghibellines defeated the Florentine Guelphs.

While a monumental Cathedral was being built in 1348, Siena was hit by the plague and its population was decimated: this marked the beginning of a period of decline, culminating in 1559, when the city lost its independence and became part of the Grand Duchy of Tuscany.

The Gothic style marks the city in both its art and architecture and adds to Siena’s special atmosphere, characterised by the use of typical materials such as terracotta bricks and local stone. A great expression of this unique character is the shell-shaped Piazza del Campo, where the City Council has its seat in the Palazzo Pubblico.
MAP OF SIENA
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EXHIBITION

A Scientific Exhibition will be arranged during the Conference.

Conference realized with the support of Banca Monte dei Paschi di Siena