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DISCLAIMER: All opinions expressed are given in good faith and in all cases represent the views of the writer and are not necessarily representative of the policy of the EUBS.

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EDITORIAL

Dear EUBS members,

In the moment of reading this issue of the EUBS Newsletter, many of you will be preparing your luggage to attend the 31st Annual Congress in Barcelona, from 7 to 10 September 2005. This time we will have a Joint Meeting with the International Congress on Hyperbaric Medicine (ICHM), the oldest and the most international institution in the field. This coincidence is providing us with a programme full of unexpected events and an unusual widely international attendance.

It is said some times as a joke: "the most important part of a Congress are not papers but coffee breaks. lunches, and informal talks in the corridors". I am convinced this is not a joke, on the contrary is a pure reality. Of course, we attend meetings to receive scientific contributions and to update knowledge; this is obvious; but you can obtain this information from other fields. The EUBS offers you every time the whole Proceedings Book -what few societies actually do- and you can get all the abstracts submitted to the Conference edited in this issue of the Newsletter. All that is of great value, of course. But only those people attending the Meeting will have the opportunity of seeing the slides, discussing topics with the authors of the papers, projecting some collaborating new research with colleagues from other countries, or simply discussing the panorama of hyperbaric medicine with colleagues from the other side of the world and delegates coming from the 5 continents.

This year we are having a really widely International Conference. More than 250 delegates are already registered in the moment of writing this Editorial. We will have not only the opportunity, as every year, of meeting our colleagues coming from almost all European Countries, but the audience will be enriched this time with the presence of colleagues from other countries not frequently attending EUBS meetings, like China, Singapore, India, Brazil, Argentina, among the almost usual representation from countries like Canada, USA, or Japan.

Please take a look over the abstracts included in this issue that will be used as a hand-programme and abstract-booklet during the Conference. We had the initial plane of having 5 Invited Speakers (one from any continent), 46 oral communications, and 64 Posters. We received up to 148 Abstracts, so the Scientific Committee had a hard work of selecting papers, being arithmetically forced to reject at least 38 papers; a really unpleasant task, specially bearing in mind the high average quality of the majority of the papers. While the time dedicated to

Oral Communications is simply impossible to be enhanced in an only three days meeting, and we absolutely refused the idea of having simultaneous sessions, we decided to enlarge the Poster exhibiting area, being finally able to accept 30 posters more. So about a 100 papers will be finally exposed.

EUBS tradition. Following the whole PROCEEDINGS BOOK will be distributed among the attendants of the meeting, as a result of the clear decision of our Executive Committee of offering a collectable book, in a determined format and layout, that will provide us with a valuable remember of all Annual Meetings of this prestigious society. Do not forget that this is possible every year thanks to a very, very great effort of all organizing committees. of compiling the full papers time enough in advance of being able to print such a book, generally at the middle of summer, what is not easy, you can believe me. The great value of the EUBS collection justifies this effort and we are convinced it will be a good help to minimize the multilingual barrier implicit in a widely international meeting like this. As every year, those not attending the Conference will have the chance to buy separately the Proceedings Book after the Conference.

This year the Abstracts of the papers accepted both for oral communication or for Posters are accessible as well through the Website of the Conference (http://www.barcelona-2005.com). This domain will remain open at least during six month after the conference, when it will be closed in order to avoid interferences with the next EUBS Annual 2006 Meeting in Bergen. After that, the Abstracts will be still available in the Websites of the ICHM (http://www.ichm.net/) and of the organizers of the conference (http://www.CCCMH.com).

These are our plans and the current features. We have been working for years in order of not disappointing you. However we rely on your comprehension and understanding to excuse some errors or mistakes we can have committed.

Welcome to Barcelona!
Welcome to Catalonia!
Welcome to Spain!
Welcome to the Mediterranean!
Welcome to Europe!
Welcome to the Joint Meeting of EUBS and ICHM in
Barcelona 2005!

Jordi Desola Secretary General

EUBS FINANCIAL STATEMENT 2004

FINANCIAL STATEMENT 1st JANUARY 2004 TO 31st DECEMBER 2004 - Sterling Account

| Bank Balance as at 1st January 2004 | | £ | 5.805,46 |
|--|--|-----------|-----------|
| Income Membership Fees Bank Interest Journal Advertising Extra copies of journal purchased Sept 04 | £ 7.900,23 £ - £ 700,00 £ 631,12 £ 9.231,35 | £ | 9.231,35 |
| Expenditure Secretarial Fees Cardnet/Bank Charges Petty Cash for Postage/ Stationery/Copying Telephone/Fax/Sundries Proceedings Costs (Not paid 2003) Leaving present Angela Randall Web Site Charges- 2002-2004 AGM 04 Presentation Gift Travel Grant - M Chappell - Meeting 04 Travel/Hotel Expenses - Treasurer Meeting 04 Journal Expenses - Outstanding from March 03 Journal Expenses - December 03 Issue Journal Expenses - March 04 Issue Journal Expenses - June 04 Issue Journal Expenses - September 04 Issue | £ 850,00 (Includes £300 owed to Angela £ 429,99 £ 600,00 (Includes s.a.e. and postage for 35,08 £ 232,16 £ 100,00 £ 522,87 £ 52,45 £ 563,45 £ 589,40 £ 830,14 £ 1.226,72 £ 1.384,03 £ 1.205,21 £ 2.259,94 (Includes 400 extra copies for 0 | r ballot) | |
| Petty cash in hand | £ 10.881,44 £ 28,87 | | 10.881,44 |
| · | terling Account | £ | 4.155,37 |
| FINANCIAL STATEMENT 1st JANUARY 2004 | TO 31st DECEMBER 2004 - Euro | Accou | ınt |
| Bank Balance as at 1st January 2004 | | € | - |
| Income Membership Fees Bank Interest Expenditure | € 1.202,05 € - € 1.202,05 | € | 1.202,05 |
| Bank Charges Travel Grant - M R De Bruijn - Meeting 04 | € 16,40 € 630,50 € 646,90 | -€ | 646,90 |
| Bank Balance as at 31st December 2004 | iuro Account (Approximately = £ 380.24) | € | 555,15 |
| Total Balance of both accounts as at 31st Decem | nber 2004 | £ | 4.535,61 |

A MESSAGE FORM THE TREASURER & MEMBERSHIP SECRETARIAT

EUBS Members are reminded that if they are not going to the Barcelona meeting to forward their payment and renewal form to me asap.

Many thanks, Tricia

PROGRAM OF THE 31st ANNUAL SCIENTIFIC MEETING OF THE EUBS

A Joint Meeting with the International Congress of Hyperbaric Medicine (ICHM)

7-10 September 2005 Hotel Barceló Sants, Barcelona, Spain

Wednesday, September 7, 2005

17:00 Registration

19:00 Welcome Reception (informal dressing)

Numbering always corresponds to the Session the papers are assigned, and their order in it.

Thursday, September 8, 2005

08:00 Registration

08:30 Opening Ceremony

09:00 LECTURE 1 – THE DEVELOPMENT OF DIVING MEDICINE IN EUROPE. THE ROLE OF DIVING DOCTORS David Elliott (United Kingdom)

SCIENTIFIC SESSION 1: ENT DISORDERS / BREATH HOLD DIVING Chair: Alain René Barthelemy (France), Antonio Salinas (Spain)

ORAL COMMUNICATIONS

| <i>10:00</i> O11 | Special Paper 1. – MIDDLE EAR VENTILATORY FUNCTION AND BAROTRAUMA |
|------------------|---|
| | <u>Avi Shupak</u> (Israel) |

10:15 O12 Special Paper 2 – INNER EAR DECOMPRESSION ILLNESS Christoph Klingmann (Germany)

10:30 O13 DECREASED INCIDENCE OF MIDDLE EAR BAROTRAUMA DURING HYPERBARIC OXYGEN THERAPY BY USING A SLOW-COMPRESSION TECHNIQUE Dil Vahidova, Pilar Zein-Sanchez, Peter H.J. Mueller (United Kingdom)

10:45 O14 CARDIOVASCULAR RESPONSES TO APNEA DURING DYNAMIC EXERCISE AND BREATH-HOLD UNDERWATER SWIMMING

<u>Uwe Hoffmann</u>, Tobias Dräger (Germany)

POSTERS

P101 INNER EAR BAROTRAUMA: A THERAPEUTIC PROPOSAL (CASE REPORT)

Marco Romagnoli, Marta Frigo, Werner Garavello, Renato Maria Gaini (Italy)

P102 LABORATORY TEST TO ASSESS THE MUSCULAR WORK CAPACITY IN BREATH-HOLD DIVERS DURING APNOEA

Carmen Vaz, Montserrat Pavon, Jose Naranjo, Ramon A. Centeno (Spain)

P103 SEAWATER DROWNING IN SARDINIA <u>Antonio Marchi</u>, A. Orrù, E. Pusceddu, M. Musu, A. Satta, V. Marrazzo, G. Finco (Italy)

11:00 Coffee Break

SCIENTIFIC SESSION 2: HOSPITAL BASED CENTRES OF HYPERBARIC MEDICINE Chair: Eric P. Kindwall (USA), Angel Crespo (Spain)

ORAL COMMUNICATIONS

- 11:30 O21 THE HYPERBARIC THERAPY UNIT OF CRIS. A SUMMARY OF A 50 YEARS
 <u>Jordi Desola</u>, Joan Sala, Ángel García, Josep Bohé (Spain)
 11:45 O22 EXPERIENCES OF NEARLY FOUR DECADES OF HYPERBARIC TREATMENT AT LARGE SCALE
- Heiko Renner, Christian Porubsky, Freyja-Maria Smolle-Juettner (Austria)
 12:00 O23 ANAEROBIC SEPSIS AND HBOT: 30 YEARS EXPERIENCES AND RESULTS
 Danica Vujnovic (Yugoslavia)
- 12:15 O24 HYPERBARIC CENTRE OF CHARITY HOSPITAL IN CARTAGENA: OVERVIEW IN A DAILY BASIS CLINICAL PRACTICE DURING THE LAST 29 YEARS

 Antonio <u>Viqueira</u> (Spain)
- 12:30 O25 BASIC RESEARCH AND CLINICAL HYPERBARIC MEDICINE
 A. Larsson, J. Uusijarvi, B. Gustafsson, H. Saraste, F. Lind (Sweden)
- 12:45 O26 CLINICAL HYPERARIC FACILTY ACCREDITATION: QUALITY IMPROVEMENT IN ACTION <u>Tom Workman</u> (United States)

POSTERS

- P201 PRESSURE RELIEF SYSTEMS IN HYPERBARIC ENVIRONMENT Kris Peelaers, Sven Van Poucke, Jurgen Galicia, Luc Beaucourt (Belgium)
- P202 GERMAN HEALTH CARE SYSTEM ACCEPTS AND REJECTS SOME INDICATIONS FOR HOSPITAL BASED HBO TREATMENT FOLLOWING AN EBM-BASED HTA PROCESS Wilhelm Welslau, Ulrich van Laak (Germany)
- P203 CRITICAL PATIENTS IN A HYPERBARIC MEDICAL CENTER. THE CRIS-UTH EXPERIENCE J. Sala-Sanjaume, J. Desola, A. García-Sanpedro, Ll. García (Spain)
- P204 OPTIMISING INTERNAL INFORMATION EXCHANGE INSIDE HYPERBARIC TREATMENT CENTRES

 Y. Neirynck, P. Germonpre (Belgium)
- P205 INITIAL AND CONTINUOUS EDUCATION AND TRAINING FOR HYPERBARIC PERSONNEL <u>Armin Schwarz</u>, P. Atkey, V. Campanaro, D. Damiens, R. Houman, A. Kanstinger, B. Kelner, M. van der Tol (Germany)
- P206 COMPARISON OF INCIDENT RATES DURING INTENSIVE CARE VERSUS NON-INTESIVE CARE HBO SESSIONS A PROSPECTIVE ONE MONTH OBSERVATIONAL STUDY IN EIGHT EUROPEAN CENTRES
 - <u>Jacek Kot</u>, M. Hajek, R. Houman, H. Klemen, A. Kemmer, H. Kirchner, P. Longobardi, C. Mortensen, J. Perttila (Poland)
- P207 TREATING THE PEDIATRIC PATIENT WITH HYPERBARIC OXYGEN: A THIRTY YEAR EXPERIENCE

 George Hart (United States)
- P208 ANALYSIS OF HYPERBARIC OXYGEN THERAPY FOR CRITICAL CARE AND EMERGENCY SAVING IN 1334 CASES

 Zhou Shurong (China)
- 13:00 Lunch Time
- 13:00 EUBS Executive Committee Lunch-Meeting
- 14:30 LECTURE 2 PAST AND PRESENT USE OF HYPERBARIC OXIGEN IN ACUTE MYOCARDIAL ISCHEMIA: A REVIEW

 George Hart (United States)

SCIENTIFIC SESSION 3: DIVING RESEARCH

Chair: Alf Brubakk (Norway), J.M. Viqueira (Spain)

ORAL COMMUNICATIONS

- 15:30 O31 EFFECT OF NITRIC OXIDE ON CIRCULATING BUBBLES AFTER SIMULATED SUBMARINE ESCAPE
 - Mikael Gennser, Lesley Blogg (Sweden)
- 15:45 O32 RECOMPRESSION DURING DECOMPRESSION REDUCE BUBBLE FORMATION IN THE PIG: FURTHER SUPPORT FOR A GAS PHASE MODEL OF DECOMPRESSION Andreas Møllerløkken, C. Gutvik, V. Berge, A. Jørgensen, A. Løset, A.O. Brubakk (Norway)

- 16:00 O33 REVERSAL EFFECT OF NMDA ON THE DECREASED STRIATAL DOPAMINE RELEASE PRODUCED BY NITROGEN NARCOSIS IN RATS

 Cécile Lavoute. Michel Weiss, Jean-Claude Rostain (France)
- 16:15 O34 EVALUATION OF DECOMPRESSION TABLES WITH DOPPLER TECHNIQUE IN COMPRESSED AIR TUNNELING IN THE NETHERLANDS.

 <u>Jurien Breedijk</u>, Ben van der Putten, Louis Schrier, Wouter Sterk (Netherlands)

POSTERS

- P301 A DEMAND CONTROLLED SELF MIXING MECHANICAL CONSTANT PO2 REBREATHER; A NEW CONCEPT AND INITIAL TESTING
 - Oskar Frånberg, R. Wigert, N. Larsson, R. Lundkvist, B. Johannesson, M. Gennser (Sweden)
- P302 EFFECTS OF BEARD GROWTH ON PURGE FREQUENCY WITH THE MBS-2000 CLOSED-CIRCUIT OXYGEN REBREATHER

 <u>David Fothergill (United States)</u>
- P303 FLOW MEASURING DIVING COMPUTER FOR SEMI CLOSED REBREATHERS

 <u>Arne Sieber (Austria)</u>
- P304 PRESSURE LIMITATION FOR GAS MICRONUCLEI ELIMINATION BY HYPERBARIC OXYGEN IN THE PRAWN
 Yehuda Arieli, Ksenya Katsenelson, Ran Arieli (Israel)
- P305 RECOMPRESSION WITH OXYGEN TO 160 kPa ELIMINATES VASCULAR GAS BUBBLES IN THE PULMONARY ARTERY, BUT DOES NOT PREVENT INJURY TO THE ENDOTHELIUM AND THE CNS Andreas Møllerløkken, Wenche Hovin, Vibeke Nossum, Mikael Gennser, Alf Brubakk (Norway)
- P306 EFFECTS OF HYPERBARIC OXYGEN ON SPINAL EVOKED POTENTIAL IN RABBITS WITH EXPERIMENTAL DECOMPRESSION SICKNESS Guangkai Gao (China)
- P307 COGNITIVE RESPONSE AND PSYCOLOGICAL PROFILE DURING 24 H SCUBA DIVING TEST Gerardo Bosco, N. D'Alessandro, V. Zanon, A. Landolfi, R. Bedini, P. Data (Italy)
- P308 THE USE OF A DEEP STOP DURING DECOMPRESSION OF AGAR GEL PLATES INFLUENCES NUMBER, DIAMETER AND TOTAL GAS VOLUME OF POST DECOMPRESSION GAS BUBBLES Alessandro Marroni, P. Bennett, F. Cronjè, C. Balestra, P. Longobardi, R. Cali Corleo, P. Germonpre, M. Pieri, M. Didone (Italy)
- P309 A MULTIPLE GAS CREVICE MODEL OF BUBBLE GROWTH Michael Chappell, Stephen Payne (United Kingdom)
- P310 THE EFFECTS OF EXPERT ERROR ON THE ACCURACY OF AUTOMATED BUBBLE CLASSIFIERS Stephen Payne, <u>Michael Chappell</u> (Israel)
- P311 SONAR ACTIVITY MAY DISRUPT BEHAVIORAL PERFORMANCE IN DEEP DIVING CETACEANS Adolfo Talpalar, Yoram Grossman (Poland)
- P312 COMPUTERISED ULTRASONIC DETECTION OF AIR EMBOLISM S.M. Egi, K. Tufan, A. Ademoglu, S. Aydin, E. Kurtaran (United States)
- P313 MACROSCOPIC INDICES AND MICROSTEREOLOGICAL STUDIES OF THE EFFECT OF TREATMENT WITH AIR RECOMPRESSION-DECOMPRESSION ON THE HEART CHANGES AFTER EXPERIMENTAL PULMONARY BAROTRAUMA

 Wojciech Kozlowski, Piotr Siermontowski, Robert Koktysz, Romuald Olszanski (Poland)
- 16:30 Coffee Break

SCIENTIFIC SESSION 4: BASIC RESEARCH - OXYGEN TOXICITY

Chair: Mahito Kawashima (Japan), Francisco Ríos (Spain)

ORAL COMMUNICATIONS

- 17:00 O41 SYMPTOMS OF CNS OXYGEN TOXICITY IN CLOSED-CIRCUIT OXYGEN DIVING Ran Arieli, Yochai Adir (Israel)
- 17:15 O42 BUBBLES FORMATION IN AGAR AND SURFACTANT MIXTURE DURING HYPERBARIC EXPOSURE
- Pasquale Longobardi, Costantino Balestra, Maurizio Didonè, Piergiorgio Data (Italy)
 17:30 O43 EXTREME HYPEROXIA AND SEVERE ENDURANCE TRAINING SHOW DIFFERENT PATTERNS OF OXIDATIVE STRESS
 - Andreas Koch, N. Bader, K. Ohltmann, W. Kähler, H-L. Torff, M. Mályusz (Germany)
- 17:45 O44 NEURONAL AND ENDOTHELIAL NITRIC OXIDE ARE INVOLVED IN HYPERBARIC PULMONARY OXYGEN TOXICITY

 <u>Dmitriy Atochin</u>, Ivan Demchenko, Paul Huang, Claude Piantadosi (United States)

POSTERS

- P401 LYMPHOCYTE ADAPTATIONS TO OXIDATIVE STRESS INDUCED BY SCUBA DIVING Joan M. Batle, M. Ferrer, A. Sureda, P. Romaguera, P. Tauler, J.A. Tur, A. Pons (Spain)
- 18:00 Special Lecture UNDERWATER ACTIVITIES IN SPAIN: A VERY OLD HISTORY. Frederic Malagelada (Spain)
- 20:00 Reception at the Maritim Museum

Friday, September 9, 2005

SCIENTIFIC SESSION 5: HYPERBARIC OXYGEN THERAPY - I

Chair: Frans J. Cronjée (South Africa), Joan Sala (Spain)

ORAL COMMUNICATIONS

| <i>09:00</i> O51 | HYPERBARIC OXIGEN THERAPY IN MAXILLOFACIAL SURGERY OVER IRRADIATED |
|------------------|---|
| | TISSUE. A RETROSPECTIVE STUDY OF 42 CASES |
| | Mario Mateos Micas, Javier Rodríguez, Gabriel Forteza, Jordi Desola (Spain) |

09:15 O52 HYPEROXIC HYPERBARIC PRECONDITIONING INDUCES NEUROPROTECTION AND ATTENUATES THE SYSTEMIC INFLAMMATORY RESPONSE IN A HUMAN MODEL OF ISCHEMIC REPERFUSION INJURIFY

Joseph Alex, J. Z. Yogartnam, G. Laden, A. R.J. Cale, S. Bennett, L. Guvendik, P. T. McCollum,

S. C. Griffin (United Kingdom)
HYPERBARIC OXYGEN THERAPY (HBOT) FOR REFRACTORY CHRONIC
OSTEOMYELITIS, ACCORDING TO EVIDENCE BASED MEDICINE

Laura Vernotico, Pasquale Longobardi (Italy)

10:00 O54 HYPERBARIC OXYGEN THERAPY FOR CRUSH INJURIES OF THE EXTREMITIES EXPERIENCE OF BELGRADE CHM INSTITUTE

<u>Dusko Micevic</u>, Tomislav Jovanovic, Marko Bumbasirevic, Svetomir Savic (Yugoslavia)

10:15 O55 HYPERBARIC OXYGEN THERAPY IN THE TREATMENT OF CHRONIC ARTHEROPATIC

DISEASE

Carlo Luongo, R. Guarino, L. Monastra, C. Cipollaro, L. Mascolo, M. Luongo (Italy)

10:30 O56 ALPHA-LIPOIC ACID SUPPLEMENTATION INHIBITS OXIDATIVE DAMAGE ACCELERATING CHRONIC WOUND HEALING IN PATIENTS UNDERGOING HYPERBARIC OXYGEN THERAPY

Renata Alleva, Emanuele Nasole, Ferruccio Di Donato, Marco Tomasetti (Italy)

POSTERS

09:30 O53

- P501 BRAIN HIPPOCAMPUS CELLULAR APOPTOSIS AND EXPRESSION OF BCL-2, BAX, CASPASE3 PROTEINS FOLLOWING ACUTE CARBON MONOXIDE POISONING FuJia Liu, ChunJin Gao, ChengQing Xia, HongYing Zhao, Man Qi (China)
- P502 EFFECT OF HYPERBARIC OXYGEN ON PLATELET MEMBRANE GLYCOPROTEIN CD31,CD61 AND CD62P IN MICE AFTER ACUTE CARBON MONOXIDE POISONING

 <u>Yi Zhang</u>, Chunjin Gao, Guozhong Wang, Huan Ge (China)
- P503 HYPERBARIC OXYGEN FOR TREATMENT OF CARBON MONOXIDE POISONING: OUR EXPERIENCE FROM LAST DECADE (1995-2004)

 Michal Hajek (Czech Republic)
- P504 MORTALITY AND MORBIDITY FROM CARBON MONOXIDE INTOXICATION IN LATVIA DURING 2002-2004 AND THE EFFECTIVENESS OF HBO TREATMENT AT 182.4-202.7 kPa FOR 60 MINUTES Ilan Lisagor, A. Sondore, V. Volksone, V. Trushus, V. Cera, V. Saksons, I. Jagmane (Latvia)
- P505 CARBON MONOXIDE POISONING IN CATALONIA. CONTROVERSIES IN SPITE OF EXCELLENT RESULTS WITH HBO IN 2610 CASES

 J. Desola, J. Sala, Ll. Garcia, A. Garcia, M. Massip, J.A. Oliva (Spain)
- P506 NECROTIZING FASCIITIS DUE TO INVASIVE PHYCOMYCETES: THE ROLE OF ADJUVANT HYPERBARIC OXYGEN THERAPY Frederick Cramer (United States)
- P507 EARLY HBO THERAPY IN ACUTE GLOBAL AND FOCAL CEREBRAL ISCHEMIA AFTER VASCULAR SURGERY: REPORT OF TWO CASES

 Beatrice Ratzenhofer, M. Hessinger, A. Keusch-Preininger, C. Paulus, K. Tiesenhausen,
 F. Smolle-Jüttner (Austria)

- P508 THE INFLUENCE OF HBO TO SOLUBLE ADHESION MOLECULE OF CEREBRAL ISCHEMIA REPERFUSION RAT
 - Lin Yang, Chunjin Gao, Guozhong Wang, Huan Ge (China)
- P509 EFFECTS OF HYPERBARIC OXYGEN ON GENE EXPRESSION OF CEREBRAL TISSUE IN MICE AFTER CEREBRAL ISCHEMIA-REPERFUSION INJURY

 <u>Chunjin Gao</u>, Lichun Zhou, Guozhong Wang, Yongjun Wang (China)
- 10:30 Coffee Break

SCIENTIFIC SESSION 6: DIVING PHYSIOLOGY

Chair: Hans Ornhagen (Sweden), Emilio Salas (Spain)

ORAL COMMUNICATIONS

11:00 O61 VARIATION OF FLOW MEDIATED DILATION AFTER MAXIMAL CYCLOERGOMETRIC EFFORT IN HEALTHY HUMANS

Mikel Ezquer, C. Balestra, P. Germonpré, T. Snoek, M. Bourgeois, A. Marroni, (Belgium)

- 11:15 O62 THE STUDY OF THE SEASHORE DIVING PHASE AND DESIGN OF DIVING EQUIPMENT CARRYING SOLUTIONS

 Noemi Bitterman, Erez Ofir (Israel)
- 11:30 O63 NO EFFECT OF WARM (35-40°C) BREATHING GAS ON SHIVERING THERMOGENESIS DURING COLD (16°C) WATER IMMERSION

 Arvid Hope, Gunnar Knudsen, Harald Sundland, Svein Bjordal (Norway)
- 11:45 O64 BIDIMENSIONAL ECHOCARDIOGRAPHY AFTER RECREATIONAL DIVING: A PRELIMINARY STUDY
 Salvador Fojon, José Sánchez-Andrade, Guillermo Aldama (Spain)

POSTERS

- P601 RESPIRATORY PARAMETERS AND BODY FAT PERCENTAGE IN DIFFERENT GROUPS OF DIVING AND NON-DIVING POPULATION

 <u>Milica Sinobad</u>, Marija Markovic (Yugoslavia)
- P602 CHANGES IN PULMONARY FUNCTION AFTER TWO MONTHS PERIOD OF INTENSIVE SPORT DIVING

<u>Dragana Ivkovic</u>, Predrag Rebic, Vesna Bosnjak Petrovic, Bozica Suzic Todorovic (Yugoslavia)

- P603 SPECIFIC PERFORMANCE TESTS FOR DIVING Tobias Dräger, Uwe Hoffmann (Germany)
- P604 SELF REPORTED HEALTH AMONG FORMER NORTH SEA DIVERS

 Å. Irgens, M. Grønning, K. Troland, E. Sundal, F. Goplen, S. Nordahl, H. Nyland, <u>E. Thorsen (</u>Norway)
- P605 PROLONGED TOTAL BODY IMMERSION IN COLD WATER EXPERIMENTATION

 <u>C. Robinet</u>, F.M. Galland, M. Hugon, A. Boussuges, A.V. Destruelle, Y. Jammes, D. Leifflen, B. Melin, J. Regnard (France)
- P606 HYPOXIA A TRIGGER FOR SPLEEN CONTRACTION?

 Matt Richardson, Robert de Bruijn, Erika Schagatay (Sweden)
- DIVING WITH DIABETES IN FRANCE: NEW REGULATIONS, SELECTION RULES AND BLOOD GLUCOSE BASED IMMERSION PROCEDURES

 Alexis Tabah, B. Lormeau, L. Dufaitre, N. Marmion, R. Bresson, O. Thurninger, A. Sola, B. Grandjean (France)
- P608 DOES MAJOR THORACIC SURGERY REALLY AFFECT THE DIVERS FITNESS? AN ANALYSIS OF A DIVING CHECK OF SUCH A PATIENT Heiko Renner, Alexej Pokorny (Austria)
- P609 THE CHANGES OF THE HUMAN PHYSIOLOGIC FUNCTIONS IN THE 150M HELIOX SATURATION-182M EXCURSION DIVING IN THE OPEN SEA <u>Yiqun Fang</u>, W. Xiao, H. Zhang, M. Hu, R. Chen, F. Yu, J. Xu, L. Pan, Z. Zhang (China)
- P610 USE OF CONCENTRATION-CONTROLLABLE NITROX GAS GENERATOR FOR UNDERWATER CONSTRUCTION DIVING

 Tohru Mochizuki, T. Ikeda, K. Kobayashi, M. Nodera, Y. Gotoh, H. Yanagisawa (Japan)
- 12:15 BOEREMA LECTURE THE GRANDFATHER OF HYPERBARIC MEDICINE AND ME! Allison Boerema-Forde (Australia)
- 13:00 Lunch Time
- **13:00 ICHM Governors Lunch** (upon invitation)

14:30 LECTURE 3 – HYPERBARIC MEDICINE PRACTICE IN CHINA: PRESENT AND FUTURE PROPECTIVES & DEVELOPMENT Chunjin Gao (China)

SCIENTIFIC SESSION 7: PATHOPHYSIOLOGY OF DYSBARIC INJURIES

Chair: Peter Mueller (Germany), Manuel Salvador (Spain)

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- 15:30 O71 DIVERS AND PLATELETS: THE PATHOPHYSIOLOGY OF DECOMPRESSION Frederick Cramer (United States)
- 15:45 O72 LUNG SQUEEZE IN SCUBA DIVING: AN UNDERESTIMATED TROUBLE Marco Brauzzi, Giovanni Sbrana, Paolo Tanasi, Laura De Fina (Italy)
- 16:00 O73 A 2-HOURS PRE-DIVE AEROBIC EXERCISE DECREASES BUBBLE FORMATION AFTER DIVING
 - J.E. Blatteau, E. Gempp, J.M. Pontier, C. Robinet, F.M. Galland (France)
 THE COMBINATION OF DECOMPRESSION-SICKNESS PLUS INTRAHORACIC
- 16:15 O74 THE COMBINATION OF DECOMPRESSION-SICKNESS PLUS INTRAHORACIC HYPERPRESSIVE SYNDROME PLUS NEAR DROWNING ("THE DIVING TRAGEDY"). Jordi Desola, Joan Sala (Spain)

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- P701 DIVING RELATED INJURIES TREATED IN ANTWERP FROM 2000 UNTILL 2005: RELATION BETWEEN DIVING RELATED INJURIES AND IN WATER SKILLS DURING DIVE TRAINING Jurgen Galicia, Sven Van Poucke, Kris Peelaers, Luc Beaucourt (Belgium)
- P702 RETROSPECTIVE STUDY ON DISBARIC DISORDES (DCI) IN SARDINIA

 Paolo Castaldi, G. Mura, C. Iesu, S. Basciu, A. Valdes, S. Mancosu, A. Masu, C. Randaccio (Italy)
- P703 DECOMPRESSION ILLNESS AND ENZYMES. A RETROSPECTIVE STUDY IN SPORT DIVERS Aldo Lozano, Gisele Coutin-Marie, Willma Padilla, Victor Morales (Mexico)
- P704 PFO AND SERIOUS DECOMPRESSION ILLNESS. A CASE REPORT Aldo Lozano-Valdes (Iceland)
- P705 DECOMPRESSION ILLNESS WITH ENTRAPMENT NEUROPATHY
 Seiichiro Togawa, Nobuo Yamami, Harumi Nakayama, Yoshihiro Mano, Masaharu Shibayama (Japan)
- P706 PREVALENCE OF EXOSTOSES AMONG DIVERS OF THE BAY OF BISCAY Juan Videgain (Spain)
- P707 HBO-THERAPY OF AN UNCLEAR DIVING ACCIDENT SUSPICIOUS FOR A SEVERE HYPOXIC BRAIN INJURY A CASE REPORT

 Karin Endermann, Armin Kemmer (Germany)
- P708 DETERMINATION OF NEUROLOGICAL SÉQUELAE BY DISBARIC ACCIDENTS IN A GROUP OF DIVERS OF CHILOE, CHILE <u>Jorge Calderón</u> (Chile)
- P709 DYSBARIC OSTEONECROSIS IN COMPRESSED AIR WORKERS Mahito Kawashima (Japan)
- P710 DYSBARIC OSTEONECROSIS OF HUMERAL HEAD DISTURBS SHOULDER JOINT Makoto Sasaki, Mahito Kawashima (Japan)
- P711 OCCUPATIONAL MEDICAL PROVISIONS IN EUROPEAN COMPRESSED AIR WORK (CAW)
 REGULATIONS A CRITICAL REVIEW
 Karl-Peter Faesecke (Germany)
- P712 REGIONAL HELICOPTER FOR EMERGENCY MEDICAL SERVICE (HEMS): FIRST AID FOR DIVING CASUALTIES FROM 2002 TO 2004

 Giovanni Sbrana, Marco Brauzzi, Paolo Tanasi, Laura De Fina (Italy)
- P713 IS IT WORTH TAKING THE RISK FOR DIVING AT AN EXOTIC DIVING SPOT? <u>Heiko Renner</u> (Austria)

16:30 Coffee Break

SCIENTIFIC SESSION 8: HYPERBARIC OXYGEN THERAPY - II

Chair: Monica Rocco (Italy), Joan M. Batle (Spain)

ORAL COMMUNICATIONS

17:00 O81 NEW STRATEGIES FOR CANCER TREATMENTS USING HYPERBARIC OXYGENATION: RADIOTHERAPY, CHEMOTHERAPY AND TREATMENT FOR BRAIN RADIONECROSIS Kiyotaka Kohshi (Japan)

17:15 O82 NEUROPROTECTIVE ANTI-APOPTOSIS EFFECT OF HYPERBARIC OXYGEN TREATMENT IN SECONDARY BRAIN DAMAGE

<u>Eilam Palzur</u>, Eugene Vlodavsky, Ran Arieli, Jean F Soustiel (Israel)

- 17:30 O83 HYPERBARIC OXYGEN THERAPY AS AN AUXILIARY TREATMENT IN VIRAL HEMORRHAGIC CYSTITIS AFTER BONE-MARROW TRANSPLANTATION Anelise Fonseca, I. Alves, M. Kohr, M. Soares, M. Knibel, J. Silva (Brazil)
- 17:45 O84 HYPERBARIC OXYGEN THERAPY IN LEPRA REACTIONS Patrick Desylva, Jandhyala Sridhar, John M (India)

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- P801 HBO2 TREATMENT DURING ISCHEMIA: ALLEVIATES BRAIN INJURY AND REDUCES STRIATAL HYDROXYL-FREE RADICALS FORMATION AND GLUTAMATE RELEASE Gerardo Bosco, Z. Yang, X. Yan, V. Zanon, B. Lettieri, C. Luongo, E. M. Camporesi (Italy)
- P802 A STUDY OF MULTIFARIOUS FACTORS ON TREATMENT OF HYPERBARIC OXYGEN IN PATIENTS WITH TRAUMATIC BRAIN INJURY AND INTRACRANICAL HEMORRHAGE Huan Ge, Chunjin Gao (China)
- P803 EFFECT OF HYPERBARIC OXYGENATION ON BRAIN HEMODYNAMIC AND MITOCHONDRIAL ACTIVITY IN VIVO

 Elhanan Meirovithz, Judith Sonn, Gennady Rogatsky, Avraham Mayevsky (Israel)
- P804 HYPERBARIC OXYGEN THERAPY REDUCES NEUROINFLAMMATION AND EXPRESSION OF MATRIX METALLOPROTEINASE-9 IN THE RAT MODEL OF TRAUMATIC BRAIN INJURY Eilam Palzur, Eugene Vlodavsky, Jean F Soustiel (Israel)
- P805 IMPLICATIONS OF HYPERBARIC OXYGEN THERAPY ON PERIPHERAL-TYPE BENZODIAZEPINE RECEPTORS IN TRAUMATIC BRAIN INJURY

 <u>Eilam Palzur</u>, Eugene Vlodavsky, Jean F Soustiel (Israel)
- P806 A STUDY PROTOCOL FOR THE HBO TREATMENT IN SEVERE HEAD INJURY PATIENT Jasenka Candrlic, Ines Takac, <u>Robert Saftic</u>, Kresimir Candrlic, Slavica Kvolik (Croatia)
- P807 EFFECT OF HYPERBARIC OXYGEN ON EXPRESSION OF INDUCIBLE NITRIC OXIDE SYNTHASE MRNA IN HIPPOCAMPUS AFTER CEREBRAL ISCHEMIA-REPERFUSION IN RATS Guozhong Wang, Chunjin Gao, Huan Ge, Rui Chen (China)
- P808 EFFECTS OF HYPERBARIC OXYGEN ON THE EXPRESSION OF PLATELET MEMBRANE GLYCOPROTEIN- CD31, CD61 AND CD62P IN RATS AFTER ACUTE HIND LIMB ISCHEMIA-REPERFUSION

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- P809 COMBINED TREATMENT OF ACUPUNCTURE, STEROID, AND HYPERBARIC OXYGEN FOR SUDDEN DEAFNESS: A CLINICAL EXPERIENCE OF 32 CASES

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- P810 HBO IN HEARING LOSS ACCOMPANIED BY TINNITUS

 Christoph Lipp, P. Stiegler, C. Walch, A. Kontaxis, V. Matzi, H. Klemen, F. Smolle-Jüttner (Austria)
- P811 ESCHERICHIA COLI GROWTH INHIBITION BY HYPERBARIC HYPEROXIA

 Joaquim Silva, A. Fonseca, R. Figueiredo, D. Mourão, M. Soares, I. Alves, M. Kohr, M. Knibel,
 M. Bozza (Brazil)
- P812 RECURRENT EXTERNAL BACTERIAL OTITIS: RISK FACTORS, PREVENTION AND THERAPY Marco Romagnoli, Marta Frigo, Lorenza Sordo, Renato Maria Gaini (Italy)
- P813 USEFULNESS OF HBO THERAPY IN RESTENOSIS AFTER CORONARY STENTING Ljiljana Mihaljevic, Slobodan Mihaljevic, Ivan Juric, Kruno Sporcic (Croatia)
- P814 HYPERBARIC OXYGEN THERAPY AND CROHNS DISEASE Kurt Johnson, Mitchell Hoggard, Donald Shirachi(United States)
- P815 ROLE OF HBO2 IN HIGH VOLTAGE ELECTRICAL BURNS

 <u>V. Vázquez</u>, E.C. Sánchez, A. Chávez, R. Uribe, J. Albornoz (Mexico)
- 18:00 Special Lecture THE AESTHETIC, THE SYMBOLS AND THE MESSAGE OF GAUDÍ Eliseu Oriol (Spain)
- 20:30 Banquet

Saturday, September 10, 2005

08:30 LECTURE 4 – HYPERBARIC MEDICINE AND THE COCHRANE COLLABORATION: HOPE OR DESPAIR?

Mike Bennet (Australia)

SCIENTIFIC SESSION 9: HYPERBARIC OXYGEN THERAPY - III

Chair: E. Cuauhtemoc Sánchez (Mexico), Angel García (Spain)

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| O92 | EFFECTS OF HYPERBARIC OXYGEN (HBO) ON GLOMERULAR FILTRATION RATE (GFR) |
| | AND ENDOTHELIAL DEPENDANT RENAL VASORELAXATION, IN RATS WITH ISCHEMIC |
| | ACUTE RENAL FAILURE (ARF). |
| | Irit Rubinstein, Zaid Abassi, Joseph Winaver, Ellena Ovcharenko, Ori Better (Israel) |
| O93 | BLEOMYCIN EXPOSURE AND HYPERBARIC OXYGEN THERAPY: A CASE SERIES |
| | Klaus Torp, Michael Ott, Martha S. Carraway, Richard Moon, Claude Piantadosi (United States) |
| O94 | HBO IN PATIENTS WITH TINNITUS - INFLUENCE OF PSYCHOLOGICAL FACTORS? |
| | Christian Porubsky (Austria) |
| O95 | IN VITRO FERTILIZATION (IVF) AND HBO THERAPY |
| | A. Mitrovic, P. Brkic, T. Jovanovic, B. Nikolic, O. Zarich (Yugoslavia) |
| O96 | LIVER PRESERVATION USING HYPERBARIC OXIGENATED PERFUSION |
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- P901 RESUSCITATION FROM EXPERIMENTAL HEATSTROKE BY HYPERBARIC OXYGEN THERAPY Ko-Chi Niu, Chunjin Gao, Mao-Tsun Lin (Taiwan)
- P902 EFFECTS OF HYPERBARIC OXYGEN THERAPY ON THE EXPRESSION OF PLATELET MEMBRANE GLYCOPROTEINS IN PATIENTS WITH ISCHEMIC STROKE Chunjin Gao, J. Zhang, L. Zhao, G. Wang, C. Xia, H. Ge, S. Niu, M. Qi, L. Yang, Y. Gao (China)
- P903 THE IMPROVEMENT OF SPEECH AND LANGUAGE DEFICITS IN 3 APHASIC STROKE PATIENTS BY HBO THERAPY: A PRELIMINARY STUDY

 Donald Shirachi, Mitchell Hoggard, Kurt Johnson (United States)
- P904 HYPERBARIC OXYGEN THERAPY AND SCLEROSING PANNICULITIS: A CASE PRESENTATION Mitchell Hoggard, Donald Shirachi, Kurt Johnson (United States)
- P905 EFFECTS OF HYPERBRIC AIR EXPOSURE ON THE FUNCTION OF MOUSE PERITONEAL MACROPHAGES

 Hengyi Tao, Haisheng Wu, Weigang Xu (China)
- P906 EFFECTS OF THE EXPOSURE TO HYPERBARIC OXYGEN THERAPY IN DIFFERENT EXPERIMENTAL MODELS OF ABDOMINAL SEPSIS

 J. Duarte, M. Leite, I. Alves, M. Korn, M. Knibel, A. Fonseca, D. Mourão, R. Figueredo, F. Bozza (Brazil)
- P907 HYPERBARIC OXYGEN THERAPY REDUCES SEVERITY AND IMPROVES SURVIVAL IN ACUTE SEVERE PANCREATITIS

 Ian Millar, M. Nikfarjam, C. Cuthbertson, K. Su, C. Malcontent-Wilson, C. Christophi (Australia)
- P908 THE EFFECT OF HYPERBARIC OXYGEN TREATMENT ON SURVIVAL DURING THE EARLY PHASE OF SEVERE BLUNT CHEST AND HEAD TRAUMA (A CLINICAL-EXPERIMENTAL STUDY)

 Gennady Rogatsky, Avraham Mayevsky (Israel)
- P909 EFFECTS OF HYPERBARIC OXYGENATION AND HIGH FREQUENCY ELECTROMAGNETIC FIELDS IN OSGOOD SCHLATTER DISEASE

 Bozica Suzic Todorovic, Dragana Ivkovic (Yugoslavia)
- P910 HIV POSITIVE HYPERBARIC OXYGENATION DOES IT HAVE PLACE HERE <u>Dusko Micevic</u>, Bozica Todorovic-Suzic, Branka Cantrak-Micevic (Yugoslavia)
- P911 HYPERBARIC OXYGEN THERAPY AND MAMMARY PROSTHESES Michiel van der Huls, Onno Boonstra, Wouter Sterk (Netherlands)
- P912 VALIDATION OF PYRAMID PROJECTION A METHOD OF DEFECT VOLUME MEASUREMENT Jiri Ruzicka, Pavel Novy, Pavel Vavra, Jiri Benes, Lukas Bolek (Czech Republic)
- P913 IMPROVEMENT OF SPERM QUALITY WITH MILD HYPERBARIC OXYGEN THERAPY [mHBOT] A PILOT STUDY

 <u>Gunnar Heuser</u>, Sylvia Heuser (United States)
- P914 THE EFFECTS OF HYPERBARIC OXYGEN TREATMENT ON THE EXPERIMANTAL ATHEROSCLEROSIS

 Tomislav Jovanovic, P. Brkic, Ana Mitrovic, Olga Zaric (Yugoslavia)
- 11:00 Coffee Break
- 11:30 EUBS Annual General Assembly

SCIENTIFIC SESSION 10: POSTERS DISCUSSION Chair: Phil Bryson (United Kingdom), Ubaldo Sánchez (Spain)

- 12:00 P202 GERMAN HEALTH CARE SYSTEM ACCEPTS AND REJECTS SOME INDICATIONS FOR HOSPITAL BASED HBO TREATMENT FOLLOWING AN EBM-BASED HTA PROCESS. Wilhelm Welslau, Ulrich van Laak (Germany) 12:05 P203 CRITICAL PATIENTS IN A HYPERBARIC MEDICAL CENTER. THE CRIS-UTH EXPERIENCE. J. Sala-Sanjaume, J. Desola, A. García-Sanpedro, Ll. García (Spain) 12:10 P207 TREATING THE PEDIATRIC PATIENT WITH HYPERBARIC OXYGEN: A THIRTY YEAR EXPERIENCE. George Hart (United States) 12:15 P208 ANALYSIS OF HYPERBARIC OXYGEN THERAPY FOR CRITICAL CARE AND EMERGENCY SAVING IN 1334 CASES. Zhou Shu-rong (China) 12:20 A DEMAND CONTROLLED SELF MIXING MECHANICAL CONSTANT PO2 REBREATHER; A NEW CONCEPT AND INITIAL TESTING. Oskar Frånberg, R. Wigert, N. Larsson, R. Lundkvist, B. Johannesson, M. Gennser (Sweden). RECOMPRESSION WITH OXYGEN TO 160 kPa ELIMINATES VASCULAR GAS BUBBLES IN THE PULMONARY 12:25 P305 ARTERY, BUT DOES NOT PREVENT INJURY TO THE ENDOTHELIUM AND THE CNS. Andreas Møllerløkken, Wenche Hovin, Vibeke Nossum, Mikael Gennser, Alf Brubakk (Norway) THE USE OF A DEEP STOP DURING DECOMPRESSION OF AGAR GEL PLATES INFLUENCES THE NUMBER, 12:30 P308 DIAMETER AND TOTAL GAS VOLUME OF POST DECOMPRESSION GAS BUBBLES. Alessandro Marroni, P. Bennett, F. Cronjè, C. Balestra, P. Longobardi, R. Cali Corleo, P. Germonpre, M. Pieri, M. Didone (Italy) 12:35 COMPUTERISED ULTRASONIC DETECTION OF AIR EMBOLISM. S.M. Egi, K. Tufan, A. Ademoglu, S. Aydin, E. Kurtaran (United States) 12:40 P602 CHANGES IN PULMONARY FUNCTION AFTER TWO MONTHS PERIOD OF INTENSIVE SPORT DIVING. Dragana Ivkovic, Predrag Rebic, Vesna Bosnjak Petrovic, Bozica Suzic Todorovic (Yugoslavia) 12:45 DECOMPRESSION ILLNESS WITH ENTRAPMENT NEUROPATHY. Seiichiro Togawa, Nobuo Yamami, Harumi Nakayama, Yoshihiro Mano, Masaharu Shibayama (Japan) DYSBARIC OSTEONECROSIS IN COMPRESSED AIR WORKERS. Mahito Kawashima (Japan) 12:50 P709 12:55 P802 A STUDY OF MULTIFARIOUS FACTORS ON TREATMENT OF HYPERBARIC OXYGEN IN PATIENTS WITH TRAUMATIC BRAIN INJURY AND INTRACRANICAL HEMORRHAGE. Huan Ge, Chunjin Gao (China) A STUDY PROTOCOL FOR THE HBO TREATMENT IN SEVERE HEAD INJURY PATIENT. Jasenka Candrlic, Ines 13:00 P806 Takac, Robert Saftic, Kresimir Candrlic, Slavica Kvolik (Croatia) EFFECT OF HYPERBARIC OXYGEN ON EXPRESSION OF INDUCIBLE NITRIC OXIDE SYNTHASE MRNA IN 13:05 P807 HIPPOCAMPUS AFTER CEREBRAL ISCHEMIA-REPERFUSION IN RATS. Guozhong Wang, Chunjin Gao, Huan Ge, Rui Chen (China) 13:10 P902 EFFECTS OF HYPERBARIC OXYGEN THERAPY ON THE EXPRESSION OF PLATELET MEMBRANE GLYCOPROTEINS IN PATIENTS WITH ISCHEMIC STROKE. Chunjin Gao, Jian Zhang, L. Zhao, G. Wang, C. Xia, H. Ge, S. Niu, M. Qi, L. Yang, Y. Gao (China) EFFECTS OF THE EXPOSURE TO HYPERBARIC OXYGEN THERAPY IN DIFFERENT EXPERIMENTAL MODELS 13:15 OF ABDOMINAL SEPSIS. Joaquim Duarte, M. Leite, I. Alves, M. Korn, M. Knibel, A. Fonseca, D. Mourão, R. Figueredo, F. Bozza (Brazil) P907 HYPERBARIC OXYGEN THERAPY REDUCES SEVERITY AND IMPROVES SURVIVAL IN ACUTE SEVERE 13:20 PANCREATITIS. Ian Millar, M. Nikfarjam, C. Cuthbertson, K. Su, C. Malcontent-Wilson, C. Christophi (Australia) HIV POSITIVE - HYPERBARIC OXYGENATION - DOES IT HAVE PLACE HERE? Dusko Micevic, Bozica Todorovic-13:25 P910 Suzic, Branka Cantrak-Micevic (Yugoslavia)
- 13:30 Special Lecture SPANISH MUSIC: MUCH MORE THAN GUITAR AND CASTAÑUELAS Jordi Desola (Spain)
- 14:00 Closing Ceremony
- 14:15 End of the Conference

Numbering always corresponds to the Session the papers are assigned, and their order in it.

BARCELONA MEETING & VISITOR INFORMATION

THE WELCOME RECEPTION

We have refused to offer you an elegant, conventional, and polite reception in a palace of the old city, thinking instead in those arriving the same day in the evening. This will be an informal first-contact meeting, to take a drink in the same Hotel, may be just arriving from the airport. Meet old colleagues, register now and obtain your documents in the registration area. You will save time and diminish crowded queues in the next morning.

CONNECTIONS TO THE CITY

Taking a taxi? Of course, if you want. Not cheap, but probably less than what you expected. But let me suggest you to <u>use our public transportation systems</u>. In the same station where you probably arrived from the airport, you will find connections to the Underground Network that will link you with almost all parts of the city.

If you prefer to take the open air, you will find in front of the Hotel, in "Plaça dels Països Catalans" a **Terminal Bus** with large number of connections. You will already have got a street map of the city and of public transportation from the Hotel. If you forgot to ask for it, we let you one with the documentation of the conference.

Renting a car? I strongly disadvice. Traffic in Barcelona is awful, terrible, a whole disaster. Even in the case that you will not be lost, you will employ one hour of your precious time to achieve a remote area available with 10 minutes of metro. And once arrived, you will invest another half an hour after deciding to go back because it is impossible to find a parking site.

MUSEUMS, MONUMENTS, SIGHTSEINGS

I cannot recommend you one among so many. This will always depend on your preferences. Everybody remembers the Picasso's, the "Sagrada Familia" or other creations from Gaudi. May be I can slightly insist in the sometime forgotten Museum of "Art National de Catalunya". You will find some of the world best collections of Romanesque wall paintings rescued from small chapels of the Pyrineum built in the XII. Century. My only real advice is that nobody should leave Barcelona without having walked quietly from LES RAMBLES, or not having walked slowly by the narrow streets of the "BARRI GOTIC", between the Cathedral, the "PLAÇA DEL REI", and the "PLAÇA DE SANT JAUME". And enter, at least once, inside the temple of "Santa Maria del Mar" one of the most impressive Gothic churches of the city. And if you are still here in Sunday morning, go to the Cathedral Square to see Sardanes dancing in the open air. You will have the chance to see a CASTELLERS exhibition too; you will be amazed by their human constructions of up to 9 floors following a very old documented tradition.

SAFETY

Is Barcelona a very dangerous city? Unfortunately safety is inversely proportional to the size and the popularity of a city and we are not an exception. Thieves are good psychologists and they immediately discover imprudent persons, and those that do not know where are they walking trough. Providing that, and taking all the caution measures recommended for any trip, I do not believe that Barcelona is more dangerous than other

cities. Of course, take care of your bags in the crowded areas, avoid dark and desert streets, and remember what you put at any pocket.

RESTAURANTS

Thousands! Not all of the same level, of course. You want to taste TAPAS? Why not, but do not forget that you are in Catalonia, and TAPAS is one of the traditions imported from other areas of Spain. You will not find in the entire city, some of these famous streets you can perhaps know from Sevilla, Bilbao and even Madrid, when dozens of Bars offered small pieces of food, any day, any time, at very cheap prices. No, this was never our tradition, but everyday more modern snack bars are offering today a kind of TAPAS selection of good quality and moderate price. You will also find plenty of small restaurants offering a full lunch or a dinner for less than the price of a hamburger in some very known fast-food shops. Do not look for that in tourist areas. There is no special recommendation; I am refraining from listing here names of my preferred restaurants.

TIPPING

Barcelona is following the same trend than may other European cities. We believe that people must have a good salary and by no mean their economy can be dependent on the generosity of their customers, and the quality of a service should not be conditioned to an extra-payment. Taxes are always included in the prices, and our tendency is to progressively diminish the importance of tips. Alternatively, you can reserve tips only to express your satisfaction for an excellent service received. You can compensate an especially sympathic servant, or an extremely accurate service, or a boy that has made you a big favour. But you are not obliged to add 15% extra tip over the price of a service. It will be appreciated of course, but they are not necessarily waiting for this.

SPECTACLES

Of any kind. Look at the "GUIA DEL OCIO" our local version of the famous TIME-OUT. Do not forget to include a visit of the "Palau de la Musica" preferably in a real performance, or the "LICEU" our Opera Theatre.

You would like to see "Flamenco" dance? So would I! I usually try to when I go to visit my friends in Malaga or in other cities from Andalucia. Again, please do not forget that you are in Catalonia. We like Flamenco, a wonderful dance from the South of Spain that the rest of the country has learned to love. There is no authentic "Tablao Flamenco" in Barcelona but any travel agency will arrange for you a visit to a good spectacle where you will see very good flamenco dancers.

SEPTEMBRE 11 IN BARCELONA

This date will always have a special meaning for everybody. Probably you do not know that Septembre 11 is from 1714 the National Day of Catalonia. It is a nice feast, and you will see every kind of cultural and traditional activities in the open air and in the street during the morning. But I do not recommend you to walk by *RAMBLES* on this day, and especially not in the afternoon. It will be too crowded and the possibility of unexpected manifestations is not rare in this date.

Jordi Desola, MD, PhD

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