European Journal of Underwater and Hyperbaric Medicine

CONTENTS

EUBS Newsletter, Volume 11 No 3, Autumn 2004
- Impressum & EUBS Executive Committee Overleaf
- Welcome Addresses 41
- Financial Statement 42
- Ed Thalman died 42
- Instructions to Authors Inside Back Cover

Program of the 30th Annual Scientific Meeting of the EUBS, Ajaccio, Corsica, 15-19 September 2004 43

Program of the Scientific Meeting of MedSubHyp Ajaccio, Corsica, 19 September 2004 49

Abstracts of the 30th Annual Scientific Meeting of the EUBS, Ajaccio, Corsica 50

Authors Index to the 30th Annual Scientific Meeting of the EUBS, Ajaccio, Corsica 86

Book Reviews
- Wound Care Practice ASM Hopson 88

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.

PRINTED in Mannheim, Germany by DRUCKFORUM GmbH
PUBLISHED quarterly by the European Underwater and Baromedical Society (EUBS)
http://www.eubs.org

EDITOR
Dr. med. Peter HJ Mueller
c/o HBO-Zentrum
Speyerer Strasse 91-93
D-68163 Mannheim/Germany
eubs@hbo-mannheim.de

CHAIRMAN of the REVIEW BOARD: Prof. Alf O. Brubakk, NTNU, Trondheim, Norway

CIRCULATION of this issue: 800

---

EUBS EXECUTIVE COMMITTEE

**PRESIDENT**
Dr. Noemi Bitterman
Technion, Israel Institute of Technology
Technion City
Haifa 32000, Israel
Tel.: +972-4-8294909
Fax: +972-4-8246631
e-mail: noemib@tx.technion.ac.il

**VICE PRESIDENT**
Vacant

**IMMEDIATE PAST PRESIDENT**
Dr. Ramiro Cali-Corleo
Hyperbaric Unit, St. Luke's Hospital
G'Mangia, Malta
Tel.: +356-21-234765
Fax: +356-21-372484
e-mail: irocali@daneurope.org

**PAST PRESIDENT**
Dr. Greta Bolstad
HelPro as
N-7012 Trondheim, Norway
Tel.: +47-73596899
Fax: +47-73591005
e-mail: gretabolstad@hotmail.com

**SECRETARY**
Dr. Joerg Schmutz
Foundation for Hyperbaric Medicine
Kleinhuningerstrasse 177
CH-4057 Basel, Switzerland
Tel.: +41-61 631306
Fax: +41-61-6313006
e-mail: joerg.schmutz@hin.ch

**TREASURER & MEMBERSHIP SECRETARY**
Ms. Patricia Wooding
35 Westmede
Chigwell, Essex, IG7 5LR, United Kingdom
Tel. & Fax: +44-20-85001778
e-mail: coppermob@freewire.co.uk

**MEMBER AT LARGE 2003**
Dr. Costantino Balestra
Environmental & Occupational Physiology Lab.
Université Libre, 91 Avenue C.Schaller
B-1180 Bruxelles, Belgium
Tel.: +32-475-486434
e-mail: daneuben@skynet.be

**MEMBER AT LARGE 2002**
Dr. Adel Taher
Hyperbaric Medicine Center, P.O. Box 152
Sharm-el-Sheikh, S. Sinai, Egypt
Tel.: +20-62-660922
Fax: +20-62-661011
e-mail: hyper_med_center@sinainet.com.eg

**MEMBER AT LARGE 2001**
Dr. Einar Thorsen
Department of Hyperbaric Medicine
Haukeland University Hospital
N-5021 Bergen, Norway
Tel.: +47-55-973973
Fax: +47-55-975137
e-mail: einar.thorsen@haukeland.no

**JOURNAL & NEWSLETTER EDITOR**
Dr. Peter HJ Mueller
HBO-Zentrum Rhein-Neckar
Diakoniekrankenhaus, Speyerer Str. 91-93
D-68163 Mannheim, Germany
Tel.: +49-621-8102 390
Fax: +49-621-8102 393
e-mail: eubs@hbo-mannheim.de
Dear Friends and Colleagues,

This current issue is dedicated to the program and the abstracts of the annual scientific meeting of the EUBS. The Scientific Committee chaired by Jean-Louis Meliet has made a fantastic work to realize a very dense program and has finally selected 55 papers and 30 posters.

On a scientific level, the meeting promises to be attractive and I hope you will appreciate its high educational level despite many externals temptations!... Concerning the general organization, which is my concern, my wish is to find an empty “complaints book” at the end of these working days. I pay therefore a particular attention to make the things as perfect as they can be.

Last, I remind you that to give a brillant feat to the 30th anniversary of our meeting, the Scientific and Organising Committees will reward the two best presentations (oral or poster) with a €1.000 prize, one in diving medicine and one other in hyperbaric medicine.

Wishing all the best to this congress and a pleasant stay to the participants, see you in Ajaccio.

Bruno Grandjean,  
Secretay General EUBS 2004

Dear Friends,

On behalf of the Scientific Committee, I would thank all members and sympathizers who proposed communications. Actually, the scientific program of this 30th Annual Meeting will be dense: 85 communications will be presented, 30 posters and 55 oral. The Scientific Committee received more abstracts than the agenda allowed time for presentations. Some were not accepted, others were shifted from oral to poster presentation, some authors were asked to merge abstracts on the same topic. The Scientific Committee made his choice on the following criteria: interest for the Society, scientific approach, clarity and originality, with a determined will to offer a tribune to our colleagues from Eastern Europe, who show in this occasion their dynamism in our discipline.

The number of retained communications did not permit to organise a session to orally present the posters to the assembly. So, the poster presentation will take place during the coffee breaks, and especially on Friday 17 September, end of morning. Presenting authors are invited to stand by their poster to answer to the numerous questions, which they will put. A Jury made of famous personalities of our Society will examine all the posters and point out the best of them, which will receive the 30th Anniversary Zetterström Award.

Finally, I would recommend to our attendees to not skip over the introductive lectures, which will be presented by famous professors or personalities whose works made our speciality to progress: thus, this week in Corsica should marry tourism, enjoyment and spirit elevation. This is all I hope to everybody!

Jean-Louis Méliet,  
Scientific Committee Secretary
EUBS FINANCIAL STATEMENT FOR THE
PERIOD 1st JANUARY TO 31st DECEMBER 2003

<table>
<thead>
<tr>
<th>Income</th>
<th>Bank Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership Fees 2002</td>
<td>Account Balance as at 01.01.03</td>
</tr>
<tr>
<td></td>
<td>1,201.36</td>
</tr>
<tr>
<td>2003</td>
<td>Stamp Stock &amp; Cash in Hand 01.01.03</td>
</tr>
<tr>
<td></td>
<td>2,960.00</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>37.67</td>
</tr>
<tr>
<td>Journal Advertising</td>
<td>Add Income over Expenditure</td>
</tr>
<tr>
<td></td>
<td>200.00</td>
</tr>
<tr>
<td></td>
<td>£4,399.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretarial Fees</td>
<td>Account Balance as at 31.12.03</td>
</tr>
<tr>
<td></td>
<td>300.00</td>
</tr>
<tr>
<td>Cardnet Charges</td>
<td>Stamp Stock &amp; Cash in Hand 3112.03</td>
</tr>
<tr>
<td></td>
<td>346.50</td>
</tr>
<tr>
<td>Postage/Telephone/Sundries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>156.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journal Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol 3 No 4 Printing</td>
<td>715.14</td>
</tr>
<tr>
<td>Postage</td>
<td>320.33</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Vol 4 No 1 Printing</td>
<td>841.12</td>
</tr>
<tr>
<td>Mailing</td>
<td>366.11</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Vol 4 No 2 Printing</td>
<td>623.15</td>
</tr>
<tr>
<td>Mailing</td>
<td>265.16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Vol 4 No 3 &amp; 4 Mailing</td>
<td>382.57</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>£3,513.58</td>
</tr>
<tr>
<td></td>
<td>£4,316.20</td>
</tr>
</tbody>
</table>

Expenditure over Income £82.83

Bank Balance £6,052.88

Ed Thalmann, M.D., Assistant Medical Director of Divers Alert Network for nine years, died July 24 in his Durham, North Carolina, home at the age of 59.

Dr. Thalmann, regarded as one of the world's foremost authorities on diving decompression, joined DAN in July 1995 as the organization's assistant medical director. He functioned as the physician resource for DAN medics, consulting with dive medicine physicians who treated patients worldwide. He headed DAN's continuing education programs for the medical staff and on-call doctors; he also participated in numerous research efforts.

While at DAN, Dr. Thalmann also worked on the Duke University Medical Center medical staff, the Duke Anesthesiology Department and at the Center for Hyperbaric Medicine and Environmental Physiology. There, he participated in both patient care (dive accidents and clinical hyperbaric oxygen treatments) and in medical research programs.

Dr. Thalmann retired from the U.S. Navy in 1993 after 22 years. While in the Navy, he helped develop operational procedures for diving, testing and evaluation of diving life-support equipment and medical research programs.

Projects included the development of new diving decompression tables (surface-supplied and saturation), measuring the performance of and writing specifications for diver thermal protective equipment, studying the effects of underwater exercise on diver performance and improving underwater breathing apparatus design and testing.

He is survived by Brenda Thalmann, former wife, and two daughters: Amanda and Katherine Thalmann, both of Durham, N.C. In lieu of flowers, donations can be made in Dr. Thalmann's name to: Durham Rescue Mission, 507 E. Knox St., Durham, NC 27701 ,USA.
PROGRAM OF THE 30th ANNUAL SCIENTIFIC
MEETING OF THE EUBS

September 15th – 19th, 2004
Palais des Congrès et Expositions Millénari d’Ajaccio
Ajaccio, Corsica

Thursday, September 16, 2004

09:00 Opening ceremony

Session 1: Diving Medicine
Chairman: J. Desola

09:15 Invited lecture
Pr Alf Brubakk: The Role of Endothelium in Decompression Illness

09:45 DM 01 HYPERBARIC OXYGEN ELIMINATES GAS BUBBLE NUCLEI: THE EFFECT OF EXPOSURE DURATION AND PRESSURE LEVEL
Ertracht O., Arieli Y., Arieli R.

10:00 DM 02 MICROPARTICLES AND DECOMPRESSION
Madden L.A., Laden G. and Greenman J.

10:15 DM 03 USE OF A DEEP (15M) AND SHALLOW (6M) STOP FOLLOWING 25 METER NO-DECOMPRESSION DIVES REDUCES DECOMPRESSION STRESS (AS OBSERVED BY DOPPLER-DETECTABLE BUBBLES) WHEN COMPARED TO EITHER A DIRECT ASCENT, OR DIRECT ASCENT WITH ONLY A SHALLOW STOP
Marroni A., Bennett P.B., Cronjé F.J., Balestra C., Cali-Corleo R., Germonpré P., Pieri M., Bonuccelli C.

10:30 DM 04 DECOMPRESSION PROTOCOLS WITH DEEP STOPS: COMPARATIVE DOPPLER STUDY WITH THE PROCEDURES OF THE FRENCH NAVY
Blatteau J-E., Hugon M., Gardette B., Galland F-M.

10:45 Coffee break

Session 2: Hyperbaric Medicine
Chairman: M. Rocco

11:15 HBO 01 IATROGENIC GAS EMBOLISM: CASE OF A PREGNANT WOMAN, WITH A CENTRAL VENOUS WAY
Harms J-D., Alberola S.

11:30 HBO 02 HYPERBARIC OXYGEN THERAPY FOR INTENSIVE CARE PATIENTS. BENEFIT ALLIANCE?
Hajek M.

11:45 HBO 03 THE EFFECT OF HYPEROXIA IN PHOTODYNAMIC THERAPY IN 3 DIFFERENT CELL LINES
Hjelde A., Gederaas O.A., Krokan H.E., Brubakk A.O.

12:00 HBO 04 HBO THERAPY FOR SURGICALLY TREATED FRACTURES OF THE CALCANEUS
Endermann K., Schöppenthau H., Kemmer A.

12:15 HBO 05 OSTEORADIONECROSIS OF THE ANKLE TREATED WITH HBO. ASSESSMENT BY DYNAMIC CONTRAST ENHANCED MRI OF A CLINICAL GOOD RESULT
Van der Kleij A.J., Maas M., Schaap G.R.

12:30 Lunch
Thursday, September 16, 2004

**Session 3: Hyperbaric Medicine**  
**Chairman: P.H.J. Müller**

13:30 **Invited lecture**  
Pr J.F. Rees: Heaven and Hell: Oxygen Toxicity in the Deep Sea

14:00 **HBO 06**  
IT IS POSSIBLE TO DOUBLE BLIND A HYPERBARIC SESSION  
Jansen T., Mortensen C.R., Tvede M.F.

14:15 **HBO 07**  
INFLUENCE OF HBO ON HEART RATE MONITORING AT PATIENTS WITH ACUTE MYOCARDIAL INFARCTION  
Dikic N., Dekleva M., Djordjevic Dikic A.

14:30 **HBO 08**  
SCINTIGRAPHIC EVALUATION OF HYPERBARIC OXYGEN EFFECT IN PATIENTS WITH RECENT MYOCARDIAL INFARCTION  
Mesimeris T., Melekos T., Balaskas A., Zarifis I., Grammatikos P., Spathis C.

14:45 **HBO 09**  
HYPERBARIC OXYGEN THERAPY (HBOT) IN CRUSH INJURIES: EXPERIENCES OF THE HBOT AND TRAUMA CENTER MURNAU, GERMANY  
Schöppenthau H., Endermann K., Kemmer A.

15:00 **HBO 10**  
HYPERBARIC OXYGENATION AND ENDOMETRIAL RECEPTIVITY  
Mitrovic A., Jovanovic T., Nikolic B., Dragujevic S., Brkic P.

15:15 **HBO 11**  
TREATMENT OF OSGOOD-SCHLATTER DISEASE BY COMBINED HYPERBARIC OXYGENATION AND HIGH FREQUENCY ELECTROMAGNETIC FIELDS  
Todorovic S.B., Ivkovic D., Bogdanovic S.S., Cubrilo D.

15:30 **HBO 12**  
INCREASED FREQUENCY OF OXYGEN SEIZURES DURING MONO-PLACE TREATMENT?  
Aanderud L., Vaagbo G., Irgens A., Forland M., Thorsen E.

15:45 **HBO 13**  
EVALUATION OF SKIN BLOOD FLOW IN PATIENTS TREATED BY HYPERBARIC OXYGEN (HBO). EFFECT OF VASODILATOR DRUG (BUFLOMEDIL).  
Thibaut G., Durand A.

16:00 **Coffee break**

**Session 4: Diving Medicine**  
**Chairman: J. Schmutz**

16:30 **DM 05**  
BAROTRAUMATIC PNEUMOCEPHALUS IN SCUBA DIVER  
Barthélémy A., Coulange M., Ranque S., Bergmann E., Sainty J.M.

16:45 **DM 06**  
QUANTITATIVE EVALUATION OF LUNG PARENCHYMA HISTOSTRUCTURE IN THE COURSE OF EXPERIMENTAL BAROTRAUMA.  
Siermontowski P., Zielinski K., Koktysz R., Olszański R., Kemka G.

17:00 **DM 07**  
MEMORY IMPAIRMENT AND IMPACT ON QUALITY OF LIFE IN PROFESSIONAL DIVERS: THE ELTHI DIVING STUDY  

17:15 **DM 08**  
WHAT FACTORS IMPACT HEALTH RELATED QUALITY OF LIFE IN PROFESSIONAL DIVERS AND OFFSHORE WORKERS? THE ELTHI DIVING STUDY  

17:30 **DM 09**  
HOMOCYSTEINEMIA AND THROMBOPHILIC FACTORS IN DECOMPRESSION SICKNESS: A PRELIMINARY REPORT  
Simon O., Lapoussiere J-M., Candito M., Van Obbergen E., Dunac A., Chatel M.

17:45 **DM 10**  
DIABETES AND DIVING: CHANGE IN REGULATIONS?  
Tabah A., Lorneau B., Bresson R., Dufaitre L., Thurninger O., Sola A.

18:00 **DM 11**  
HANDICAP DIVING – CHALLENGE AND REHABILITATION. PROJECT VERTICAL AGAIN  
Dikic N., Zivanic S., Zivojinovic B.M., Radikovic P.

18:15 **DM 12**  
CONTRIBUTION TO THE UNDERSTANDING OF THE MEDIAL MAXILLARY ARTERY COMPRESSION SYNDROME WITH POTENTIAL IMPLICATIONS FOR DIVERS  
Snoeck T., Emonts P., Van Assche M., Martin Pacheco D., Ezquer M., Lemort M., Balestra C.
Friday, September 17, 2004

Session 5: Hyperbaric Physiology
Chairman: E. Jansen

08:30  Invited lecture
Pr Peter Radermacher: Genotoxicity of Oxygen

09:00  HP 01  ARTERIAL BLOOD GAS PROFILES IN SPONTANEOUSLY BREATHING INTENSIVE-CARE PATIENTS AFTER HBO THERAPY
Ratzenhofer-Komenda B., Offner A., Zink M., Offner P., Gabor S., Renner H., Klemen H., Smolle-Juttner FM., Toller W.

09:15  HP 02  ENDOTHELIUM DEPENDENT MECHANISM OF OXYGEN INDUCED REDISTRIBUTION OF BLOOD FLOW IN HEMORRHAGIC SHOCK AND SEPSIS
Bitterman H., Weber G., Goldberg M., Rubinshitein R., Brod V.

09:30  HP 03  CEREBRAL OXYGEN DELIVERY AND BRAIN OXYGENATION WHILE BREATHING OXYGEN UNDER PRESSURE
Demchenko I.T., Piantadosi C.A.

09:45  HP 04  THE EFFECTS OF LEPTIN ON VASOMOTOR TONUS UNDER THE HYPERBARIC CONDITIONS
Jovanovic T., Brkic P., Mitrovic A., Jovanovic N.

10:00  HP 05  THE SIGNIFICANCE OF MAGNESIUM CONCENTRATION FOR HYPERBARIC OXYGENATION EFFECTS
Jovanovic T., Brkic P., Mitrovic A., Jovanovic N.

10:15  HP 06  PROTEIN PEROXIDATION DURING 0.5-HOUR EXPOSURE TO 280 kPa(a) PO2 IN HEALTHY HUMANS
Kot J., Sicko Z., Wozniak M.

10:30  HP 07  VENTILATORY PARAMETER MONITORING DURING INTENSIVE CARE HYPERBARIC TREATMENTS
Germonpré P., Baekelandt D., Bruyns T.

11:00  Coffee break -
Tour of Poster Exhibition (no oral presentation)

Saturday, September 18, 2004

Session 7: Diving Physiology
Chairman: J. Kot

08:00  Invited lecture
Pr J. Régnard: During and Post-Immersion Circulatory Status: Landmarks for Diving Pathological Issues

08:30  DP 01  HEMOGLOBIN LEVELS IN ELITE DIVERS, ELITE SKIERS AND UNTRAINED HUMANS
de Bruijn R., Richardson M., Haughey H., Holmberg H.C., Björklund G., Schagatay E.

09:00  DP 02  ERYTHROPOIETIN PRODUCTION AS A RESULT OF REPEATED APNEAS
de Bruijn R., Richardson M., Milling U., Lemon H., Schagatay E.

09:15  DP 03  THE EFFECT OF DIVING ON ENDOTHELIAL FUNCTION IN MAN
Brubakk A.O., Duplančić D., Valic Z., Uglesic L., Wissloff U., Bakovic D., Đurić Z.

09:30  DP 04  PHYSIOLOGICAL INCREASE OF NT-PROBNP DURING SCUBA DIVING IN MAN
Gempp E., Blatteau J-E., Louge P., Drouillard I.

09:45  DP 05  DO OBSERVED CHANGES IN HAEMOSTASIS AFTER DECOMPRESSION MAY BE PREDICTIVE FACTORS IN THE ASSESSMENT OF THE RISK OF DCS?
Olszanski R., Radziwon P., Laszczyńska J.

10:00  DP 06  INCREASED EXPIRED NITRIC OXIDE AFTER VENOUS GAS EMBOLI IN RABBITS
Agvald P., Gustafsson L., Adding C.L., Linnarsson D.

10:15  Coffee break
Saturday, September 18, 2004

Session 8: EBASS Session
Chairman: T. Mesimeris
10:45 N 01 NURSING WORK IN A TOP LEVEL HYPERBARIC FACILITY
Schwarz A., Kemmer A.
11:00 N 02 THE ITALIAN ASSOCIATION OF HYPERBARIC TECHNICIANS (A.N.Te.I.)
Campanaro V.
11:15 N 03 IMPORTANCE OF THE QUALITY OF INTAKE AND INFORMATION TO PATIENTS IN HBO-CENTRES
Leonard D., Houman R., Germonpré P.
11:30 N 04 HYPERBARIC OXYGEN THERAPY FOR INTENSIVE CARE PATIENTS. BENEFIT ALLIANCE?
Hajek M.
11:45 N 05 HYPERBARIC OXYGEN THERAPY: ORGANISATION OF THE COLLECTION AND TRANSMISSION OF DATA CONCERNING PATIENTS SESSIONS
Houman R.
12:00 N 06 THE RATING OF THE SATISFACTION FACTOR AMONG PATIENTS IN A CLINICAL HYPERBARIC CENTER
Houman R.
12:15 N 07 CREATION OF A NETWORK OF HOSPITAL NURSES AND FREELANCE NURSES FOR PATIENTS WITH A HEALING DELAY TREATED BY HBO THERAPY
12:30 EUBS Annual General Assembly
13:00 Lunch

Session 9: Safety - Technology – Computing
Chairman: P. Germonpré
14:00 Invited lecture
Dr Michael Lang: The Smithsonian Research Diving
14:30 ST 01 A EUROPEAN CODE OF GOOD PRACTICE FOR HYPERBARIC OXYGEN THERAPY
14:45 ST 02 THERMO-CHEMISTRY TRANSITION FROM A CATALYTIC COMBUSTION TO FIRE OF A HAND WARMER IN AN ELEVATED PRESSURE AND OXYGEN RICH ENVIRONMENT
Le Péchon J-Cl., Most J-M., Oriani G.
15:00 ST 03 THE USE OF THE HILBERT-HUANG TRANSFORM IN THE AUTOMATED DETECTION OF VENOUS GAS EMBOLI
Chappell M.A., Payne S.J.
15:15 ST 04 THE ARTERIAL BUBBLE MODEL FOR DECOMPRESSION TABLE CALCULATIONS
Imbert J.P.
15:30 ST 05 A SUBJECTIVE EVALUATION OF A DRINKING SYSTEM FOR DIVERS USED IN SATURATION DIVING
Hope A., Brekken R.
15:45 Coffee break

Session 10: Diving Physiology
Chairman: Jean-Claude Le Péchon
16:15 DP 07 THE EFFECTS OF NITROGEN AND HELIUM ON CNS OXYGEN TOXICITY IN THE RAT
Arieli R., Adir Y.
16:30 DP 08 RESPONSE TO CO₂ IN NOVICE CLOSED-CIRCUIT APPARATUS DIVERS AND AFTER ONE YEAR OF ACTIVE OXYGEN DIVING AT SHALLOW DEPTHS
Eynan M., Arieli R., Adir Y.
16:45 DP 09 WORK-EFFICIENCY OF UNDERWATER FIN-SWIMMING WITH INCREASING WORKLOADS
Koch A., Holzum M., Riekert H.
17:00 DP 10 PRESSURE MODULATION OF ISOLATED GLUTAMATE NMDA SYNAPTIC RESPONSE IN MAMMALIAN CENTRAL NERVOUS SYSTEM
Amir M., Grossman Y.
17:15 DP 11 BRAIN LIPID PEROXIDATION AND BEHAVIOUR IN RATS AFTER REPEATED HBO
Shepeleva Y.V.
17:30 Closing Remarks
**Poster exhibition**

**Jury for poster award:**
- **Chairperson:** Noemi Bitterman, President of EUBS
- **Scientific Committee members:** JC Le Pêchon, A Gata Simao, M Hamilton-Farrell, AJ Van der Kleij

**P01** THE ORALLY EFFECTIVE MIXTURE OF SOD AND WHEAT GLIADIN GLISODINE<sup>®</sup> PROTECTS AGAINST HBO-INDUCED DNA DAMAGE
Albicini M., Kick J., Hauser B., Ehrmann U., Leverve X.M., Radermacher P., Speit G., Muth C.M.

**P02** HEAT SHOCK TREATMENT PRIOR TO DIVE INCREASES SURVIVAL IN RATS
Bye A., Medby A., Brubakk A.O.

**P03** NEUROPSYCHOMETRIC DATA COMPARISON BETWEEN SPORTS DIVERS, SPORTS FIGHTERS AND CONTROLS
Balestra C., Germonpré P., Ezquer M., Snoeck T., Marroni A.

**P04** LEISURE SCUBA DIVING: PULMONARY EDEMA IS LIFE-THREATENING AND PROBABLY UNDERREPORTED

**P05** SEARCH FOR CEREBRAL ARTERIAL BUBBLES AFTER HUMAN AIR DIVING. RELATIONSHIP WITH RIGHT-TO-LEFT SHUNT AND CIRCULATING VENOUS BUBBLES
Blatteau J.-E., Hugon M., Galland F.-M.

**P06** INFLUENCE OF SCUBA DIVING ON ASYMPTOMATIC ISOLATED PULMONARY BULLA
Germannpré P., Balestra C., Pieters T.

**P07** DIVING ACCIDENTS: KEY WORD FOR THE DISPATCH OF A MEDICALISED HELICOPTER AND ANALYSIS OF ACCIDENTS
Joray F., Schoettker P., Glanzmann Y., Fishman D., Spah D.R.

**P08** OPPOSING EFFECTS OF NITROGEN EXPOSURE AT 3 MPA, BEFORE AND AFTER SUCCESSIVE DIVES AT 1 MPA, ON THE STRIATAL DOPAMINE RELEASE.
Lavoute C., Weiss M., Rostain J.-C.

**P09** TEN YEARS OF PROSPECTIVE STUDIES IN RECREATIONAL DIVING
Denoble P.J., Vann R.D., Bennett P.B., Marroni A.

**P10** PERFORMANCE OF SAFETY STOPS
Galicia J., Van Poucke S., Pelaers K., Beaucourt L.

**P11** INHIBITION OF HO-1 INCREASES HBO-INDUCED DNA-STRAND BREAKS IN VIVO
Gröger M., Radermacher P., Speit G., Muth C.M.

**P12** NO INCREASES HBO-INDUCED DNA-STRAND BREAKS IN VIVO
Gröger M., Radermacher P., Speit G., Muth C.M.

**P13** UNUSUAL CAUSE OF CONVULSION IN A HYPERBARIC CHAMBER. A CASE REPORT.
Fürster W.S., Angerer P., Oberfeld K.

**P14** HYPERBARIC OXYGEN THERAPY (HBO) AND NEONATAL ARM ISCHEMIA
Harms J-D., Ruzic J-C., Fodor D., Randrianaly H.

**P15** HYPERBARIC OXYGEN IMPROVES PUDENDAL NERVE TERMINAL MOTOR LATENCIES. A DOSE RESPONSE STUDY.
Laden G., Gardiner A., Duthie G.S.

**P16** EFFECTS OF HIGH OXYGENATION IN THE ERADICATION OF *HELCOBACTER PYLORI* – A MICE MODEL

**P17** DOSIMETRIC STUDY OF HYPERBARIC OXYGEN TREATMENT FOR REDUCTION OF SECONDARY BRAIN DAMAGE
Palzur E., Vlodavsky E., Mulla H., Arieli R., Feinsod M., Soustiel J.F.

**P18** COMPLICATIONS AND SIDE EFFECTS OF HYPERBARIC OXYGEN THERAPY: A PROSPECTIVE STUDY.
Souday V., Henry P.-E., Chretien J-M., Asfar P., Alquier P.

**P19** CHOSEN OCULOGRAPHIC PARAMETERS ASSESSMENT DURING HYPERBARIC EXPOSITION TO 4 AND 6 ATA.
Laszczynska J., Truszczynski O., Kempe G., Kurek P.

**P20** NO NEGATIVE EFFECTS OF DIVING AND COMBAT-SWIMMING ON STATIC AND DYNAMIC LUNG-FUNCTION PARAMETERS IN AN OVER 10 YEARS FOLLOW-UP
Koch A., Mannchen L., Rieckert H.

**P21** RAPID BAROMETRIC PRESSURE CHANGES AS A RISK OF DECOMPRESSION SICKNESS DURING AEROMEDICAL TRAINING.
Laszczynska J., Kempe G., Jarosz A.
P22 THE EFFECT OF NITRIC OXIDE ON VASCULAR BUBBLE FORMATION IN PIGS
Mollerlokken A., Berge V., Jorgensen A., Lundsett N., Brubakk A.O.

P23 HEART RATE MONITORING AT DIVERS – DIVING BRADICARDIA OR EFFORT TACHYCARDIA
Dikic N., Zivojnovic B.M, Radifikovic P., Matic D.

P24 EFFECTS OF A SINGLE OPEN WATER DIVE TO 42 METERS ON PULMONARY FUNCTION
Ivkovic D., Rebic P., Delic M., Bosnjak P. V., Radojevic R., Todorovic S.B.

P25 CARDIOVASCULAR AND METABOLIC RESPONSES TO REPEATED APNOEAS IN TRAINED DIVERS AND NON-DIVERS
Lemaître F., Delahoce J., Touny-Chollet C., Polin D.

P26 NO HYPOXIC PULMONARY VASOCONSTRUCTION DURING APNEA IN EXERCISING HUMANS
Linnarsson D., Lindholm P., Sundblad P., Brodin L.Å., Kaijser L.

P27 COMBINED ACCLIMATION TO HEAT AND SLIGHTLY ELEVATED ATMOSPHERIC PRESSURE PREVENTS THE PROTECTION AGAINST CNS OXYGEN TOXICITY INDUCED BY HEAT ACCLIMATION ALONE.
Eynan M., Arieli Y., Erbracht O., Gancz H., Arieli R., Kashi Y.

P28 CONSUMER-BASED APPROACH FOR DIVING EQUIPMENT EVALUATION.
Bitterman N., Ratener N.

P29 NEW EXPERIMENTAL HYPERBARIC CHAMBER
Ruzicka J., Benes J., Bolek L.

P30 HIGH VOLTAGE ELECTRIC INJURIES AND HBOT
Vujnovic D.

---

London Hyperbaric Medicine

Hyperbaric Medicine
A Team Course for Health Care and Diving Professionals.
40 hours of theory and practical experience with both monoplace and multiplace chambers incorporating the British Hyperbaric Association (BHA) Core Curriculum. Approved for CHT and CHRN/ACHRN by The National Board of Diving & Hyperbaric Medical Technology (NBDHMT) Cost: £450

4th – 8th October 2004 & 7th – 11th March 2005

Advanced Hyperbaric Technology and Safety Course
40 hours of theory and practical training for those responsible for the supervision and safety of hyperbaric facilities. Cost £450

4th - 8th April 2005

Course Director: Roly Gough-Allen
Contact for these and other courses: Ms Tricia Wooding
T: (+44) 0208 539 1222 E: mail@londonhyperbaric.com
Whipps Cross University Hospital, Leytonstone, London. E11 1NR

---
REUNION SCIENTIFIQUE D’AUTOMNE
AJACCIO
DIMANCHE 19 SEPTEMBRE 2004

THEME: LA SECURITE DES MODELES DE DECOMPRESSION
TOPIC: SAFETY OF THE DECOMPRESSION MODELS

PROGRAMME

Langue officielle: français
Official language: French; simultaneous translation from French to English

09H00: Bilan de 12 années d’utilisation de la table MN 90 par la Marine Nationale. Analyse rétrospective de 61 accidents de désaturation. (Assessment of 12 years using MN90 decompression table in the French Navy. Retrospective analysis of 61 DCS.)
BLATTEAU, GUIGUE, HUGON, GALLAND

09H15: Validation des procédures de décompression. Méthodologie employée par la Marine Nationale Française. (Validation of decompression procedures. The French Navy methodology.)
HUGON, BLATTEAU, GALLAND

09H30: Etude des bulles veineuses circulantes chez l’homme. Comparaison doppler pulsé / doppler continu en détection précordiale. (Study of circulating venous bubbles in human. Comparison between pulsed and continuous precordial Doppler detection.)
BLATTEAU, HUGON, GALLAND

09H45: Pour une décompression sécurisée en plongée autonome profonde. (For an increased safety in SCUBA deep diving.)
GARDETTE, HUGON, GALLAND

10H00: Etude doppler des procédures de décompression à l’air. Comparaison avec le protocole de la Marine Nationale Française. (Doppler study of air decompression procedures. Comparison with the French Navy protocol.)
BLATTEAU, GARDETTE, GALLAND

10H15: Recherche de bulles artérielles cérébrales après plongée à l’air chez l’homme. Relation avec le shunt D/G et la charge en bulles veineuses circulantes. (Search for cerebral arterial bubbles after air dives in humans. Relation with R/L shunting and the venous bubble load.)
BLATTEAU, HUGON, GALLAND

10H30: Pause café (Coffee break)

11H00: Expérimentation « Immersion de longue durée » : une coopération de 6 équipes de recherche. Présentation générale de l’opération. (The «Long Lasting Immersion» experiment: cooperation between six research teams. General presentation.)
ROBINET, GALLAND, HUGON, JAMMES, REGNARD, LEIFFLEN, MELIN, BOUSSUGES

11H15: Cinétique du statut hémodynamique après 6h d’immersion fraîche. (Kinetics of the hemodynamic status after 6 h of cool immersion.)
MOUROT, WOLF, MELIN, ROSSI, HUGON, DESRUELLE, ROBINET, REGNARD

11H30: L’exposition au froid restreint la perfusion sanguine périphérique après plongée (Cold exposure restricts peripheral blood perfusion after diving.)
WOLF, MOUROT, JIMENEZ, BOUSSUGES, HUGON, SCHMID, GALLAND, REGNARD

BERGMANN, QUERUEL, DURAND-GASSELIN
BOOK REVIEWS

Wound Care Practice
Eds: Sheffield, P.J. Smith, APS. Fife, CE

ISBN 1-930536-16-X
Hardcover, 814 pages, $158.00
www.bestpub.com
Tel.: 800.468.1055 (Toll-free) or 928.527.1055
Fax: 928.526.0370

Wound Care Practice is a hefty reference aiming to provide a review of wound care from a truly multidisciplinary perspective. By combining everything from the basic science of the problem wound, to clinical coding and billing in the reader's newly developed wound healing centre (and passing through almost every point in between), the editors have produced a text which they undoubtedly hope will be the essential desk-top reference in the field. The book is divided into 5 sections, starting with a review of the basic science of the problem wound and healing process. Subsequent sections concentrate on wound assessment; wound management; pain, infection and adjunctive therapies; and healthcare delivery.

60 authors from the USA and Canada contribute, their number including people from the fields of basic and clinical science, nursing, occupational therapy, physiotherapy, infection control and business. The section on wound assessment provides a detailed description of the process involved in assessing wounds, referring the reader back to the "final common pathways" seen in the failing wound. Classification is also described, although it is a little unwieldy as different wound aetiologies have their own scoring systems. Every piece of the assessment process from history taking to specialist investigation is described, with specific chapters dealing with investigation of vascular disease, transcutaneous O2 monitoring and laser Doppler flowmetry.

Principles of wound management is broken down into chapters dealing with both general principles, including debridement, surgical intervention and post-operative care, and the problems presented by specific types of wound, patient groups and underlying conditions. This section of the book provides an excellent grounding in wound management principles. By starting with a general and basic introduction, but moving quickly through a more advanced description of management options and treatment modalities, the reader quickly appreciates current thinking in care of the problem wound. There are very useful descriptions of surgical management including skin grafting and flap formation.

Management of specific types of wound is dealt with exhaustively in separate chapters, and includes everything from pressure sores to necrotic wounds secondary to spider bites. The chapters are generally accompanied by useful photographs which add to the text.

The fourth section of the book is titled Pain, Infection and Adjunctive Therapies, and includes chapters on the use of nutritional support, physiotherapy and occupational therapy, and appropriate pain control. Hyperbaric Oxygen Therapy is dealt with in this section of the book, where the reader is introduced to the concept of oxygen as a drug. The science behind oxygen transport in the hyperbaric environment is discussed, along with the mechanisms by which HBOT affects wound healing. The UHMS accepted indications for HBOT are reviewed, and the difficulty in providing good quality evidence even in these conditions is acknowledged. The rationale for HBOT in selected disorders related to wound management is discussed and references provided, although this is not as definitive a list as provided by the UHMS HBOT Committee Report – although the reader is directed towards this document. There is a useful section on patient selection, and the use of TcpO2 in this setting is described.

The last section provides information on the business side of wound healing centres, but also includes information on infection control and management of latex allergies. Clearly, this text is an ambitious attempt to collect almost every possible element of wound care management into one source. The editors are to be congratulated on providing what is a truly comprehensive book.

As with any project of this size, there are some difficulties in ensuring a consistent approach. A number of chapters appear to cover similar ground, and could possibly have been combined to form a more concise review. There are different styles of presentation and referencing between chapters, which, if corrected, would have provided a more uniform feel. Those chapters which use bulleted lists and text boxes are perhaps easier to glean information from quickly, but this is probably a more personal opinion.

Despite this, the book is well presented, easy to read and comprehensive. It succeeds in its aim of providing a multidisciplinary approach, and covers an exhaustive range of wound care issues. It will provide a useful resource for those working in wound care. It does not aim to be a quick reference guide to diagnosis and management in wound care, and those looking for such should direct their attention elsewhere.

Dr ASM Hopson. FRCA, B.Sc. (Hons)
Whipps Cross University Hospital, Leytonstone
London E 11 1NR, United Kingdom
INSTRUCTIONS TO AUTHORS

The EJUHM welcomes contributions (including letters to the Editor) on all aspects of diving and of hyperbaric medicine. Manuscripts must be offered exclusively to the EJUHM, unless clearly authenticated copyright exemption accompanies the manuscript. All manuscripts will be subject to peer review, with feedback to the authors. Accepted contributions will be subject to editing.

Manuscripts are accepted in English, and also in major European languages (French, Spanish, Italian and German) when accompanied by an English abstract.

Contributions should be sent to
Dr. Peter HJ Mueller, Editor EJUHM, C/o HBO-Zentrum Rhein-Neckar am Diakoniekrankenhaus Mannheim, Speyerd Strasse 91-93, D-68163 Mannheim/Germany. Fax: +49-621-8102 393. Phone: +49-621-8102 390. E-mail: eubs@hbo-mannheim.de

Requirements for Manuscripts
The EJUHM is composed on a PC using Word processing. Documents are acceptable on disc or by e-mail. Illustrations and tables should NOT be embedded in the Word document, only their position indicated. All tables are to be separate documents. Illustrations should be separate documents in Word or JPEG, clearly marked with the format used. References should be in the correct format, shown in the next column. Two printed copies of all text, tables and illustrations must accompany submissions.

The printed copies should be double-spaced, using both upper and lower case, on one side of the paper only, on A4 paper. Headings should conform to the format in the Journal. All pages should be numbered. No part of the text should be underlined. These requirements also apply to the abstract, references, and legends to figures. Measurements are to be in SI units (mm Hg are acceptable for blood pressure measurements) and normal ranges should be included. All tables should be double spaced on separate sheets of paper. No vertical or horizontal rules are to be used.

Photographs should be glossy black-and-white and slides should be converted to photographs before being sent. Colour reproduction is not available. Legends should be less than 40 words, and indicate magnification.

Abbreviations do not mean the same to all readers. To avoid confusion they should only be used after they have appeared in brackets after the complete expression, e.g. decompression illness (DCI) can thereafter be referred to as DCI.

The preferred length for original articles is 2,500 words or less. Inclusion of more than 5 authors requires justification. Original articles should include a title page, given the title of the paper and the first names and surnames of the authors, an abstract of no more than 200 words and except in unusual situations be subdivided into Introduction, Methods, Results, Discussion and References. After the references the authors should provide their initials and surnames, their qualifications, and the positions held when doing the work being reported. One author should be identified as Correspondent for the Editor and for readers of the Journal. The full current postal address of each author, with the Telephone, facsimile numbers and e-mail address of the corresponding author, should be supplied with the contribution. No more than 40 references per major article will be accepted. Accuracy of the references is the responsibility of authors. Acknowledgments should be brief.

Abstracts are also required for all case reports and reviews. Letters to the Editor should not exceed 400 words (including references which should be limited to 5 per letter).

References
Authors are responsible for verifying references against the original documents. References must be numbered consecutively in the order in which they first appear in the text, and identified in the text by arabic numerals in parentheses. References cited only in tables or legends should be numbered in accordance with a sequence corresponding to the first mention of the table or figure in the text. List names and initials of all authors when six or less, when seven or more, list only the first three authors and add et al. Citations in the reference list are to be in the form used by the U. S. National Library of Medicine and Index Medicus:

Manuscripts that have been accepted should be cited in the reference list as regular references, with "in press" in place of journal pages. Citations such as "unpublished observations", "personal communication", "manuscript in preparation", or "to be published" are not to appear in the reference list, although reference to such a communication, if it exists in written form, may be cited in the text in parentheses. References to government reports should not be cited unless such reports are easily available to all readers.

Consent
The EUBS endorses the principles of the Declaration of Helsinki on the treatment of human subjects and approved guiding principles in the care and use of animals. Any report of experimental investigation on human subjects must contain evidence of informed consent by the subjects and of approval by the relevant institutional ethical committee.

REPRINTING OF ARTICLES
Permission to reprint original articles will be granted by the Editor, subject to the author's agreement, provided that an acknowledgment, giving the original date of publication in the EJUHM, is printed with the article. Where the author has claimed copyright at the end of the article requests for permission to reprint should be addressed to the author, whose address appears at the end of the article.

Papers that have been reprinted from another journal, which have been printed with an acknowledgment, require permission from the Editor of the original publication before they can be reprinted. This being the condition for publication in the EJUHM.

EJUHM ARTICLES SUBMISSION CALENDAR

<table>
<thead>
<tr>
<th>Issue</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring: March</td>
<td>15 February</td>
</tr>
<tr>
<td>Summer: June</td>
<td>15 May</td>
</tr>
<tr>
<td>Autumn: September</td>
<td>15 August</td>
</tr>
<tr>
<td>Winter: December</td>
<td>15 November</td>
</tr>
</tbody>
</table>