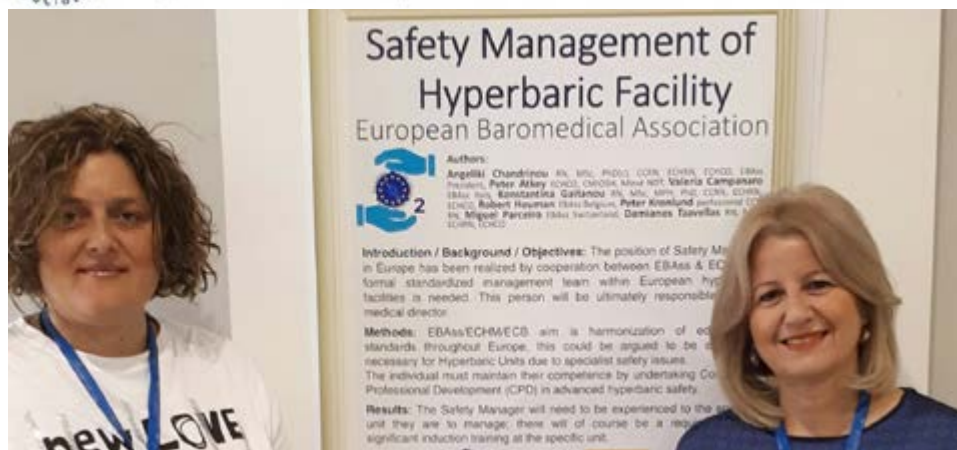




## European Baromedical Association

for nurses, operators and technicians



EBAss is all of you!

## Words from the Editor

by **Damianos Tzavellas**, General Secretary, President of EBAss Communication Committee

Dear members,

The release of this Newsletter has come at a time full of preparations for our 1st Safety Manager Course. All the Board of Directors and our host in Porto are still modifying the last details in the programme, the presentations and the venue so that everything is in place and as functional as possible. The level of participation seems to have overcome our expectations for this very first attempt. There are already 13 hyperbaric professionals around Europe that have been assigned to the course successfully. For those who didn't hear about the course until now, we apologise for any lack in communication and we wait for them to come at the next one, hopefully after one year.

Please also find in this newsletter our President's report from the last EUBS congress in Ravenna as well as photos

from the delegates, the lecture rooms and the venue. We have also included the EBAss poster for the new role of the Safety Manager that was published at the congress. Finally, with great pleasure we have gathered for one more time a good number of new publications that refer to hyperbaric practices and a lot new hyperbaric congresses for the coming year!

And don't forget..we welcome all of you that work as nurses and technicians, in Europe and abroad, to contribute with your interest and knowledge for the strengthening and expansion of this hyperbaric networking. Visit us at our GAs or our EUBS satellite meetings or communicate with us through our newsletter and email.

Feel free to send



# EBAss Newsletter

## July-September 2017

Calendar of Events



🕒 **UHMS Annual Scientific Meeting**, 28-30 June 2018, Disney's Coronado Springs Resort, Lake Buena Vista, Florida

<https://www.uhms.org/>

🕒 **2nd Tricon Scientific Conference (EUBS, SAUHMA, SPUMS)**, 23-29 September 2018

Durban, South Africa

<http://www.tricon2018.org/>

🕒 **HTNA Annual Meeting, 2018**, Perth, Western Australia

<http://www.htna.com.au/images/conference-pdfs/2017-preliminary-program.pdf>

🕒 **EBAss Safety Manager course**, 17-20 October, Portugal

<http://www.ebass.org>

🕒 **EBAss General Assembly and meeting for the Board of Directors**, 21-22 October, Portugal

<http://ebass.org/bd-and-ga-in-porto/>

🕒 **British Hyperbaric Association Annual Scientific Meeting and AGM**, 2018, Rugby, UK

<http://www.ukhyperbaric.com/meetings/2018-annual-scientific-meeting-and-agm/>

🕒 **Canadian Undersea and Hyperbaric Medical Association (CUHMA) Annual Scientific Conference**, 27-29 October

news from your hyperbaric facility or hyperbaric oxygen related articles for publication at our newsletter. You can also send comments for current or previous issues at [info@ebass.org](mailto:info@ebass.org)  
Enjoy your reading!!

2017, Ottawa, ONTARIO

<https://cuhma.ca/events/annual-scientific-meeting>

🕒 20th International Congress on Hyperbaric Medicine, 13-16 September 2020, Rio de Janeiro

[http://www.eubs.org/?ai1ec\\_event=20th-international-congress-on-hyperbaric-medicine&instance\\_id=12](http://www.eubs.org/?ai1ec_event=20th-international-congress-on-hyperbaric-medicine&instance_id=12)

## EBAss News

### EBAss activities of the last 3 months

- ✓ EBAss was present at the last EUBS conference in Ravenna.
- ✓ A Safety Manager Course has been finalized and is about to run for the 1st time in October 2017. Registration process has closed.
- ✓ BD has decided to review the statutes of the Association at the next GA in Porto.
- ✓ A first communication with the new French Hyperbaric Association has been made.



## Report from the EBAss President from the last EUBS congress in Ravenna

by Angeliki Chandrinou, President of EBAss

### Dear members,

The European Underwater and Baromedical Society underwent the 43rd Congress of Diving and Hyperbaric Medicine. In the splendid setting of Ravenna, 290 hyperbaric specialists from 34 different countries met. About 80 speakers presented 13 themed topics and the EUBS Scientific Director reviewed and evaluated a total of 108 abstracts, 68 posters and 40 oral presentations. The fields covered included intensive medicine, radiotherapy, oncology, hyperbaric technology, underwater medicine, neurology and difficult injuries.

As the President of EBAss, I had the honor to represent our Association, by being the chair person at the BAROMEDICAL SESSION: “APPLICATION OF STANDARDS FOR HYPERBARIC

TECHNOLOGY”. It was a very constructive meeting with much information from various companies which are involved in the industry of hyperbaric chambers as well as that of medical devices used under hyperbaric conditions. In addition, we heard an interesting speech by the EUBS President, Assoc. Professor Dr. Kot, regarding the expectations of users of medical devices

which are intended to work in high-pressure environments. During the session, Professor J. Desola referred to an accident that happened a few weeks ago in Spain and came across negative comments as well as confusion about the definition of “diving chamber” (referred to a non-medical device) and “hyperbaric chamber” (referred to a medical device).

The last 2 years’ common efforts of both EUBS and EBAss were also highlighted. Those efforts have been focusing on the identification of ways that will ensure quality, safe provision of services at a hyperbaric unit and moreover, an attempt to replicate the spirit of the idea «Prevention is better than cure». Such words have been stated thousands years ago,



by Hippocrates, paving the way for preventive medicine. Consequently, the new role of the “Safety Manager” together with the “1st Safety Manager Course” which will take place in Porto this October, have been widely accepted by the Hyperbaric Community.



During the meeting, a poster with title “Safety Management in Hyperbaric Facilities” has been presented, authored by the EBAss BD. It explains in detail this new role which has been assigned for hyperbaric facilities.



As the President of EBAss, I participated at the “Board of Representatives” meeting and during the Gala dinner, I was delighted to be honored by the EUBS President for the work of EBAss all these years, offering me a commemorative gift.

During the EBAss workshop, the topics of discussion were the conclusions from the meeting of the Board of Representatives and the meeting of the Joint Committee for Accreditation of Centers. In addition, Dr. Kot reported details that may require changes in the certification of hyperbaric centers. At the end we discussed details concerning the program and the presentations of the upcoming Safety Manager course whereas Mr. Peter Kronlund presented us his interesting work “Improved Infection Spread Control with Optimised Monoplane Room Design”.

# Announcement of the EBAss Safety Manager Course

by EBAss

## Admission Criteria

The minimum requirements are completion of an introductory course in Hyperbaric Medicine and working experience in facilities that deliver Hyperbaric Oxygen Therapy. Applications are therefore considered from physicians, nurses, operators and technicians. Priority will be given to nurses and operators that have been certified under the EBAss scheme of ECHRN and ECHCO.

## Objective

The course’s objective is to prepare the participant for the role of the Safety Manager in Hyperbaric facilities. Main points of the role are based on a “Global” approach to management of safety and education within the

team, including:

- the implementation of effective Safety Management and Quality Assurance systems with the use of guidelines, clinical protocols and internal audits that comply with local, national and European directives as well as with evidence based practices.
- the application of risk assessment and incident/accident reporting procedures within the Hyperbaric Centre.
- the acceptance and monitoring of effective education programs; including requirements for Clinical Practice Development of the hyperbaric team.

## Course Description

This 3 day course (from 09.00-17.00 each day) is designed to provide experienced hyperbaric

personnel with the knowledge and skills needed to fulfil the criteria for the role of the Safety Manager. The emphasis will be on the review of European Norms that are related to hyperbaric technology (e.g. EN 14931, EN 14971, EN16081), presentation of the European Code of Good Practice with reference to clinical practice, staff and patient education, infection control policies, firefighting systems and strategies, documentation, risk analysis and general principles in safety management such as safety culture.

## Language

The official language of the course is English. All study material as well as exams will be given in English. Therefore, it is strongly recommended that par-

ticipants have a very good level of English.

### Course Location

The venue will be announced at least 6 months before the beginning of every course.

### Registration Fee

400 EURO for EBAss members, 600 EURO for non EBAss members

Fees are refundable upon cancellation up to 45 days before each course's starting date

Registration is completed after payment of the full fee amount

Fees will cover: Course syllabus, Certificate of

Attendance, coffee and lunch breaks, travel expenses and accomodation of instructors.

### Accomodation

Participants are responsible for their travel and accomodation arrangements.

Successful completion of this course is demonstrated by attendance for all days, a score of 70% on the post test (in 30 minutes time), practical assessments and submission of a completed anonymous course evaluation. Particiapants will also be able to sit an online test within 2 months after the course.

## Recent Publications

abstracts of articles related to Hyperbaric Nurses and Technicians, excl. medical indications or interventions

**keywords:** Hyperbaric, oxygen

**search machine:** Medline

**period of search:** 6/2017 - 9/2017

1. A pleural vacuum relief device for pleural drain unit use in the hyperbaric environment.

Gelsomino M. et al. 2017, Diving Hyperb Med. Sep;47(3):191-197.

### CONCLUSION:

The water seal pleural drain unit (PDU) for pleural vacuum relief (PVR) device we have developed works well, minimizing attendant workload and automatically avoiding the excessive negative intrapleural pressures (IPPs) that can otherwise occur. This device should only be used with suction.

2. Decompressing recompression chamber attendants during Australian sub-

marine rescue operations. Reid MP et al. 2017, Diving Hyperb Med. Sep;47(3):168-172.

### CONCLUSION:

The probability of at least one incident of DCS among attendants, with consequent strain on resources, is high if attendants breathe air throughout their exposure. The introduction of 90 minutes of oxygen breathing greatly reduces the probability of this interruption to rescue operations.

3. Reduction of side effects of hyperbaric oxygen therapy with thymoquinone treatment in rats. Gunes AE et al. 2017. Undersea Hyperb Med. Jul-Aug;44(4):337-343.

### CONCLUSION:

Long-term and repeated HBO<sub>2</sub> treatment leads to damage to the lung tissue. In urgent situations or cases of severe hypoxia, repeated HBO<sub>2</sub> sessions may be necessary, and



thymoquinone (TQ) antioxidant agents may be useful for prevention of HBO<sub>2</sub>-associated injury. TQ may represent a useful therapeutic option during HBO<sub>2</sub> treatment.

4. Is decompression illness possible during hyperbaric therapy? a case report. Gariel C et al. 2017. Undersea Hyperb Med. May-Jun;44(3):283-285.

## CONCLUSION:

Given the risk of gastric barotrauma and venous gas embolism, physicians should be aware of gastric band history before HBO<sub>2</sub> therapy.

## 5. Changes in pulmonary function in hyperbaric chamber inside attendants: a case-control study.



Ozdemir A. et al. 2016. Undersea Hyperb Med. Nov-Dec;43(7):805-811.

## CONCLUSION:

Working as an inside attendant (IA) does not deteriorate pulmonary function in the short term. However, there is a need for long-term follow-up studies.

## 6. Test results for the evaluation of a glucometer for use under hyperbaric conditions: Technical report.

Tsouras T. et al. 2017. Undersea Hyperb Med. Jan-Feb;44(1):27-32.

## CONCLUSION:

The results indicate that the Abbott Optium FreeStyle H blood glucose monitor operated normally when used in the hyperbaric chamber. This glucometer was found to perform within the calibration specification requirements for accuracy at all stages of a typical hyperbaric treatment and as such the Abbott Optium FreeStyle H blood glucose monitor was deemed safe for use in the hyperbaric chamber at the Alfred Hospital.

## 7. Evaluation of the Carefusion Alaris PC infusion pump for hyperbaric oxygen therapy conditions: Technical report.

Smale A. and Tsouras T. 2017. Undersea Hyperb Med. Jan-Feb;44(1):17-25.

## CONCLUSION:

We have found that the pumps pose no enhanced risk as an ignition source, and

that the pumps operate within manufacturer's specifications for flow rate and occlusion alarms at all stages of HBO<sub>2</sub> treatments, up to 4.0 ATA and pressurization and depressurization rates up to 180 kPa/minute. The pumps do not require purging with air or nitrogen and can be used unmodified, subject to the following conditions: pumps are undamaged, clean, fully charged, and absent from alcohol cleaning residue; pumps are powered from the internal NiMH battery only; maximum pressure exposure 4.0 ATA; maximum pressurization and depressurization rate of 180 kPa/minute; LVP modules locked in place with retaining screws.

## 8. Transcutaneous oximetry measurements of the leg: comparing different measuring equipment and establishing values in healthy young adults.

Trinks TP et al. 2017. Diving Hyperb Med. Jun;47(2):82-87.

## CONCLUSION:

Lower-leg TCOM measurements using different Radiometer TCOM machines were comparable. Hypoxia has been defined as lower-leg TCOM values of less than 40 mmHg in non-diabetic patients and this is supported by our measurements. The majority (96.9%) of the lower leg TCOM values in healthy young adults are above the hypoxic threshold.



## 9. Applying quality improvement methods in a hyperbaric oxygen program: reducing unnecessary glucose testing.

Stevens SL et al. 2017. Undersea Hyperb Med. 2016 Jul-Aug;43(4):427-435.

## CONCLUSION:

A quality improvement (QI) project implemented by a multidisciplinary team in a hyperbaric practice was feasible and has improved the management of diabetic patients undergoing HBO<sub>2</sub> therapy. Considering how the hyperbaric community values the culture of safety and considering the feasibility of this project, more QI training and projects in hyperbaric programs should be performed by our measurements. The majority (96.9%) of the lower leg TCOM values in healthy young adults are above the hypoxic threshold.

## Attention!!

Our next General Assembly and meeting for the Board of Directors will be held in Porto, Portugal at 20-21 of October 2017.

For information go to [www.ebass.org](http://www.ebass.org).

The registration form for becoming a new EBAss member or renew your existing membership you can find online at <http://ebass.org/registration-form/>

The process for members to join the Board of Directors can be found in part IV of the EBAss statutes at <http://ebass.org/satutes/>

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