

# European Journal of Underwater and Hyperbaric Medicine



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## EDITORIAL

### Dear Readers!

Having to tell you repeatedly that this journal is lacking contributions from the Societies members is rather saddening and disappointing, so that I'm actually tempted to make the names of those who have assured me for several occasions that they will keep their word and send the promised papers but have failed to do so public here. However, I will refrain from doing so and hope that this appeal reaches those addressed.

This also applies to the winners of the EUBS Annual Scientific Meeting's Zetterström Award. I am still missing two recent papers to be submitted, and one that has been submitted and already been reviewed, but never has been re-submitted with the reviewers comments implemented by the authors.

Those of you who actually do read the Journal, including my editorial remarks, and who wish to submit papers, please note the change of my address as it appears in the imprint on the opposite page, effective immediately.

With my best wishes for the Season, a very Merry Christmas and a Happy New Year,

Peter

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## PRESIDENT'S COLUMN

### Dear Friends

This is my first letter to you after the EUBS meeting in Barcelona, and a great opportunity to thank Jordi for the excellent meeting we had. It was extremely well organized, and had one of the highest rates of attendees. Special compliments go to Jordi for his idea to add fascinating and enjoyable lectures about the culture of Spain at the end of each day. And a particularly warm round of applause, of course, for the very special lecture by Jordi about Spanish music.

Combining our meetings together with the International Congress on Hyperbaric Medicine (ICHM) and the High Pressure Biology group gave us the very welcome opportunity to meet friends and share ideas. We should definitely consider meeting in a broader format more

often! Along those lines, we were working on the possibility of having a combined meeting with the UHMS in 2009 in Edinburgh. It has been a long time since our two organizations have met together and a number of us are members of both societies.

The year 2005, which marked the 100<sup>th</sup> anniversary of Einstein's famous papers on the discovery of the photon, special relativity, and Brownian motion, will soon come to end. It is amazing to consider that, in spite of the famous figure with the mad gray hair who comes to our mind when we talk about Einstein, he was only 26 years old in 1905 when he made his greatest contribution to the world.....

But the reason I raise the topic of Einstein is related to UNESCO's declaration of 2005 as the "World Year of Physics". Browsing through the activities related to "Physics Year", I was pleased to find a very interesting effort to teach physics through sports. Various sites and links, at different levels starting from elementary school level, demonstrate and explain physics through discussions of baseball, cricket, basketball, soccer, hockey, football, cycling, skateboarding, skydiving, tennis, golf and others. Yet, surprisingly (and I sincerely apologize if I missed one or two sites) diving and underwater activity were not among them. There was no mention of diving as a model for teaching physics, even though we all know how closely diving is related to physics, and how useful our very vital diving experience can be for explaining physics to young students. Maybe one of us will put us on the physics map as well?

The year 2005 also brought tremendous sadness and tragedy around the world. Nature showed us its powerful face, subjecting us to natural disasters from the Asian tsunami to Hurricane Katrina and the Pakistan earthquake. Let's hope that we will be exposed to Mother Nature's more benign side in the coming year.

In the meantime, I would like to wish you a pleasant holiday season and a very happy new year with lots of good medicine and bright, innovative research. Let me conclude with Albert Einstein's words: "If we knew what it was we were doing, it would not be called research, would it?"

All the best,

Noemi

# FIRST ANNOUNCEMENT

## EUBS 2006

### 32<sup>nd</sup> Annual Scientific Meeting of the European Underwater and Baromedical Society on Diving and Hyperbaric Medicine

August 23<sup>rd</sup> - 26<sup>th</sup>, 2006  
Bergen, Norway

Organised by EUBS in collaboration with  
Norwegian Baromedical Society and Centre for Hyperbaric Medical Research

## WELCOME TO BERGEN!

Host city of the 32<sup>nd</sup> Annual Scientific Meeting of EUBS.

Ever since the intrepid King Olav Kyrre sailed into the harbour and founded the city in 1070, Bergen has attracted people from all quarters of the world. Bergen became a melting-pot of cultures and Norway's most international city at the time.

Bergen expanded around its colourful harbour - it was the hub of commerce, seafaring and craftsmanship, and became the first capital of Norway. So important was Bergen by the 13th century that the Hansas - the German medieval guild of merchants - opened one of their four European offices on the wharf called Bryggen. Some of the Hansas chose to become Bergensers. And so have many others throughout the centuries.

*But Bryggen stays the same, its contour just as it was in the 11th century, untouched by changing times. It has become a symbol of our cultural heritage and has gained a place on UNESCO's World Heritage List. Bergen has become a World Heritage City.*



*Bergen is an international town with small-town charm and atmosphere. The inhabitants love to show off their beautiful and many-sided city. They are proud of Bergen's shipping, trading and cultural traditions. The city with its 235,000 inhabitants is like a spectacular amphitheatre clambering up the mountainsides, overlooking the sea, embracing you. You can roam through living history in this modern city, the gateway to the wildest and loveliest fjords of Norway.*

Tradition, initiative and drive have made Bergen one of Norway's most vigorous cultural cities. It is not merely by chance that Norway's biggest cultural event, the Bergen International Festival, is held here each year, or that the town was chosen to be one of the European Cities of Culture in the year 2000. The old parts of town are living history, and the museums and galleries keep both art and the ancestral heritage alive. *The Hanseatic wharf Bryggen, the Fish Market, the composer Edvard Grieg's home at Troidhaugen, Rasmus Meyer's art collection, the Aquarium and Old Bergen are just a few of the many attractions worth visiting.*

## VENUE

The meeting will be held at Radisson SAS Hotel Norge located in the heart of Bergen. The hotel is within walking distance from historical sights and modern shopping areas. Its traditional history and atmosphere are combined with modern amenities. All hotels are within walking distance from the conference hotel.

## HOW TO GET TO BERGEN

There are direct flights from Copenhagen, Stockholm, Helsinki, Amsterdam, London and Paris. You can go by boat from Denmark and Newcastle-upon-Tyne in England.



## SOCIAL ACTIVITIES

**Welcome reception** will be held on Wednesday August 23<sup>rd</sup> at the medieval castle Håkonshallen, which was built during the reign of King Håkon Håkonsson between 1247 and 1261. It was the largest (and most imposing) building of the royal residency in 13th century Bergen, which was the political centre of Norway at that time.

**Boat trip** on the fjord on Thursday August 24<sup>th</sup> with "Statsraad Lehmkuhl" - the pride of Bergen. It is Norway's largest and oldest square-rigged sailing ship. It is also one of the world's oldest and best-preserved sailing ships.

**Guided Tour of Bergen.** A 3-hour extensive city sightseeing including a visit to Edvard Grieg's home at Troidhaugen.

Tour I: City Sightseeing with visit to Troidhaugen and Old Bergen Museum.

Tour II: City Sightseeing with visit to Fantoft Stave Church and Troidhaugen.



## POST-CONGRESS COURSES:

Ultrasound for decompression monitoring Trondheim, Norway August 28th-30th, 2006. During the course, there will be theoretical lectures and discussions as well as ample opportunity to test different methods of bubble detection, using a wide variety of equipment.

Diving in cold waters Stokkøya, Norway (near Trondheim) August 31<sup>st</sup> - September 3<sup>rd</sup>, 2006. A practical diving course. Some of the methods introduced in the above mentioned course will be used during scuba diving at Stokkøya. Visit [www.stokkoya.no](http://www.stokkoya.no) for info about the dive centre.

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## MEETING REPORTS

### EUBS meeting in Barcelona sets records

By R.W. Bill Hamilton

The the 31st Annual EUBS meeting held jointly with the 15th International Congress of Hyperbaric Medicine in Barcelona during 2005 September 6-11, was the best attended meeting ever for both EUBS and ICHM. Organized and hosted primarily by Jordi Desola, the meeting had 380 pre-registered attendees and another 25 or so showed up as the meeting was underway, making the total just over 400. Furthermore, a total of 54 countries were represented; without looking through the records I would guess that that is some kind of record also. A good EUBS meeting in the past has involved around 200 attendees, and Jordi was expecting about that many, so the meeting's unexpected popularity caused some need for adjustment. The meeting room turned out not to be big enough for everyone to sit at tables, and although it was not excessively crowded, it was gratifying to see that virtually all sessions had a good audience.

There were several special lectures, one on diving doctors by David Elliott, and hyperbaric talks by George Hart, Mike Bennett, and Gao Chunjin. Dr. Elliott told us how important the diving doctor has been to the development of commercial diving in Europe, Dr. Hart walked us through how he got treated when he had a heart attack despite reluctance in the ER ("It's my heart and it's my chamber, so put me in it."), Dr. Gao described the remarkable growth of HBO<sub>2</sub> in China (thousands of multiplace chambers) and acknowledged the vigorous promotion of HBO<sub>2</sub> over many years by Dr. Li Wenren, known to many of us. Dr. Mike Bennett showed how evidence-based medicine can be reviewed using a well organized system, the Cochrane Convention, and noted some progress. We learned also about the history of diving in Spain, heard some music in the Spanish tradition, and learned about Antoni Gaudi whose art and architecture have been a major part of the charm of Barcelona for about a century.

The Boerema Lecture was given by Allison Forde-Boerema, the granddaughter of the grandfather of hyperbaric medicine, the granddaughter of Ite Boerema. This was an intimate personal story of how dedicated real innovators have to be.

There were a total of 128 papers (by my count) in the two fields, of which 60 were on diving and 68 on HBO<sub>2</sub>. So even when combined with a hyperbaric congress there is still interest in diving and diving research. Eighteen of the posters considered most appropriate for discussion were allowed a 5-min oral presentation and time for questions during a final session.

The program was published in the last issue of this journal so it is not necessary to repeat that information,

but the organization of the meeting and the Proceedings deserves comment. This was superbly well done. Jordi and the Scientific Committee did a fantastic job of juggling a lot of papers and posters to fit them in. There was of course a rigid limitation of the number of papers that could be presented orally (41 were scheduled, plus the lectures and luncheon presentations), but they were able to expand the poster space to include some 87 posters. Posters were supposed to be left up during the whole meeting and were attended by the authors during the break after the related session. But also the posters were reproduced (and are readable) in the Proceedings, so there was not the usual urgency to try to read more than one possibly could in the time available. Oral presentations had two-digit numbers and posters used 3 digits, with the first number in both cases being that of the session, and the oral presentations had an "O" and the posters a "P." UHMS could learn from this.

I would have liked an index by page numbers, but it was still fairly easy to find a paper from the time schedule or the author index. Also, for anyone doing a program like this, you can be helpful to your audience by putting a header on every page giving the day of the week and the session number and title. I have to go through and pencil those in so I can find my way quickly.

Jordi's organization is all the more remarkable in that he was facing the major act of getting married in a couple of weeks, and we were pleased to be able to meet his charming fiancé Carmen. It is the first marriage for both of them. Not to be outdone, our editor Peter Mueller and his new wife Ursula were married just a couple of weeks before the meeting.

One thing that did not work out as well as it could have was the reception at the Maritime Museum, during which we endured an interesting but much too long lecture by the medical minister about Barcelona and the museum, which was double the duration because it had to be translated to English.

The Zetterstrom Award for the best poster went to 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* by Andreas Møllerløkken, Wenche Hovin, Vibeke Nossun, Mikael Gennser and Alf Brubakk from Norway. The ICHM award for the best oral presentation went to O52: *HYPEROXIC HYPERBARIC PRECONDITIONING INDUCES NEUROPROTECTION AND ATTENUATES THE SYSTEMIC INFLAMMATORY RESPONSE IN A HUMAN MODEL OF ISCHEMIC REPERFUSION*

*INJURIFY* by Joseph Alex, J.Z. Yogartnam, G. Laden, A.R.J. Cale, S.Bennett, L. Guvendik, P.T. McCollum and S.C. Griffin from the United Kingdom.

This was my first time in Barcelona, and I thoroughly enjoyed the city. The conference hotel was atop the train station, and many folks used trains to see more of Spain and Europe before and after the conference. And many of us became comfortable on the subway system. On our first attempt, however, we were trying to use a bus map, and we popped up at the Sagrada Familia by mistake, which was one of the Gaudy-designed places we had intended to visit anyway. We later took the bus tours all around the city, a really nice way to do it. The tours for accompanying persons were all quite good. The social center of Barcelona is the Rambla, a walking street with all sorts of shops and bars and pickpockets (one of our group found this out).

The banquet was at a charming restaurant that overlooked all of Barcelona, and even the ocean in the other direction.

As mentioned, there were so many of us that there were more people than the restaurant could easily handle, but we all got fed a good meal and had a lot of great social time with our colleagues.

We were disappointed that the technical diving symposium had to be cancelled because some of the intended speakers could not make it, but this left no competition for the refresher course on fitness to dive, which was well received.

Jordi's introduction to the Proceedings points out how important it is for the papers to be in ahead of time so they can be included fully. Because of this format the papers are not peer reviewed ahead of time, so it is important that there be discussion; there was time for discussion following most papers. And speaking of discussion, it is always lubricated by some good coffee, and we were glad to find it morning and afternoon on most days.

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## UHMS has great meeting in Las Vegas

By R.W. Bill Hamilton

In one of the best attended meetings ever, the UHMS welcomed a strong worldwide representation to a raucous and rowdy tourist destination that nevertheless met our needs for a good meeting. It is clear that hyperbaric oxygenation is maturing as a recognized and meaningful medical entity, but it was gratifying to see that diving is very much alive and well.

The sumptuous opening reception showed a lot of warmth and friendliness as everyone greeted old friends; we shared a great feeling, and enjoyed a wonderful meal.

Attending were many regulars, familiar faces from Australia and New Zealand, other east Asia countries, Japan, Britain, Scandinavia, much of Europe and Israel, and of course a good contingent from the Americas.

We were very pleased to see that Dr. Per Olaf Barr managed to make it to the meeting, despite the fact that he had some trouble getting around. The meeting staff graciously took good care of him and helped him meet his needs and cover for the fact that his luggage did not arrive. Many of us recall his bungee jumping at the Denver meeting in 1994.

The Flamingo like most other Las Vegas hotels is huge, and it was a long hike for some of us to the meeting area. Some rooms were a little short on amenities, others were loud, but our creature comforts were nourished by the UHMS's continental breakfast, coffee, and afternoon treats, which were both lavish and delicious. Coffee service gets an A for being available until late in the afternoon. The coffee was good, so much that on Friday we drank 42 gallons of it! But we had lots of good

reasons for staying awake as the interesting sessions progressed.

The posters were in the same room as the exhibits, and the meeting room was right next door, a good arrangement. The pattern was for some selected papers to have a 12-min oral presentation, and the room was comfortable with a good view of the slides and good audio. It was easy to come and go from the seats (most of them at tables) in that room. However, the program booklet was quite confusing to use, and there was not a clear link between presented papers and posters (the September EUBS meeting organized mainly by Jordi Desola managed this beautifully). Most of the posters were done with the large photographic sheets so were clear and easy to read.

One of the nice features of UHMS in recent years has been the topical reviews in plenary presentations at the beginning of each morning and evening session. These are worth mentioning. Richard Moon brought us up to date on arterial gas embolism and decompression sickness, mentioning among other things the "hot" item of the possible protection by heat shock proteins. Claude Piantadosi covered the ubiquitous and important hormone, nitric oxide, and how NO inhibitors by reducing vasodilation might protect against oxygen toxicity. John Feldmeier focused a lot of physiological details toward laying to rest the myth that HBO<sub>2</sub> promotes tumor growth. Lin Weaver offered some cogent philosophy on bolstering HBO<sub>2</sub> by carefully planned and organized prospective trials. Bob Warriner reported that at least in the U.S. the economic pattern for HBO<sub>2</sub> is relatively healthy. Dick Clarke reviewed some of the conditions worth studying that are not currently on the "approved" list and

recommended looking on Medline for “hyperbaric oxygenation.” Bill Zamboni addressed the importance of salvaging limbs as opposed to developing prostheses (which some patients will not wear). Claes Lundgren discussed the many facets of breath-hold diving, and with colleague Peter Lindholm is organizing an upcoming workshop on the topic. Niel Hampson gave some intriguing aspects about both the demographics and economics of carbon monoxide poisoning (this was particularly relevant following the destructive paths of hurricanes Katrina and Rita, since people insist on running their gasoline-powered generators indoors).

Another feature of the program are the luncheon lectures. Here we heard John Feldmeier on topical oxygen, Noemi Bitterman on recreational diving equipment, the Burases on wound healing theory.

**Kronheim lecture.** Our own Alf Brubakk in this year’s lecture took a systems approach to show that the many details of both preventing and dealing with decompression sickness leaves a lot to be learned, but progress is being made. For example, deep stops or brief recompressions can reduce Doppler bubbles.

**Committees.** In years past it has been difficult for those on committees to attend all the meetings and still hear the interesting papers. Lately the practice has been to put all the committee meetings on a special day when there were no papers (but the committees were in competition with the pre-course on limb salvage). The “committee day” has worked except for those of us on several committees, since for some unexplained reason they all seem to fall in the same time block. Even so, this is a good way to do it and it works for most.

**Golf.** Following up on a very successful golf day in San Diego, long time UHMS supporter Ted Gurnee (head of OxyHeal) tried to organize another golf day in Las Vegas, and even got his friend and renowned professional golfer Billy Casper to agree to participate, but not enough golfers signed up so the golf day was cancelled. To replace this, Ted graciously agreed to sponsor those who wanted to play golf on Friday, and this seemed fine, but that left an afternoon with no program. This was too tempting to the program organizers, so the schedule was

changed to move the Saturday papers to Friday and this basically shut out those of us who were eager to play golf if we could do that without missing any papers. Bummer. And I had promised Peter Mueller that I would play. . . .

**Pre and Post Courses.** The pre-course this year was a comprehensive look at both the techniques and philosophy of limb salvage. It was well received. The post-course was a serious look at the issue of diabetes and diving. Managed largely by Guy Dear, Neal Pollock and Donna Ugucioni, this will result in a report that puts this issue in perspective, covering experience, limits, and techniques used in order for diabetics to be able to dive with acceptable safety.

**Associates and BNA.** One under-appreciated part of the normal UHMS meeting is the Associates and Nurses program. These usually address the practical side of the field, particularly when it comes to conducting safe and effective hyperbaric operations. This is an ongoing program throughout the whole meeting period. This year there was attention to the materials, methods, and medications that improve wound care, as well as a review of incidents and how to deal with them.

**CME.** An important aspect of the UHMS meeting for doctors and other medical professionals is Continuing Medical Education, CME, credits. This process involves a lot of work by the staff, but it pays off. As part of this the attendees are asked to assess the program and its value, and such feedback, when it is done well, helps to improve future programs—please fill out the forms!

One of the things we have been watching in recent years has been the growth of hyperbaric medicine relative to diving research. In a hurried count this year we had some 85 diving papers and 92 HBO<sub>2</sub> papers, give or take a few cancellations and reschedulings, but many of the HBO<sub>2</sub> papers on oxygen toxicity apply to diving issues just as well, so diving is still holding its own.

All in all, we had a really fine turnout of many, many skilled and accomplished colleagues, and this really made the whole conference worthwhile.



# 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

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## 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

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1. Thorsen E, Risberg J, Segadal K, Hope A. Effects of venous gas microemboli on pulmonary gas transfer function. *Undersea Hyperbaric Med* 1995; 22:347-353.
2. Hempleman HV. History of decompression procedures. In: Bennett PB, Elliott EH, Eds. *The physiology and medicine of diving*. London: WB Saunders, 1993:324-375.
3. Kindwall EP, Goldmann RW. *Hyperbaric medicine procedures*. Milwaukee, WI: St. Luke's Medical Center, 1970.

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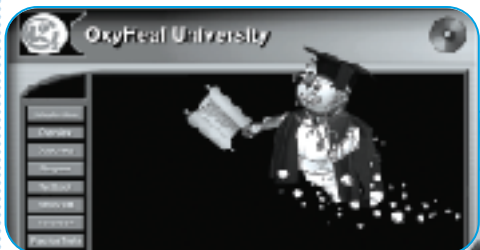
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