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European Journal of Underwater and Hyperbaric Medicine

Official NEWSLETTER

EUBS European Underwater and Baromedical Society

CONTENTS

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ASSISTANT EDITOR Hyperbaric Medicine and Clinical Applications: **Till S. Mutzbauer**
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EUBS EXECUTIVE COMMITTEE

EDITOR'S COLUMN

Dear Readers!

We have all been deeply shocked by the tragedy of the 11th September. The world has changed thereafter and we have been forced to accept that nothing is to be taken for granted, in particular our safety in this world. Although we have not learned about any losses amongst our Society's membership, many of us are suffering from the loss of relatives or friends indirectly. Our sympathy remains with the victims and their loved ones.

Dr. Einar Thorsen from Norway has been elected by the membership for a three year tenure as Member-at-Large. Congratulations! He replaces Dr. Peter Germonpré from Belgium, who will remain active for the Society as the EUBS webmaster. Peter is also the Secretary General of the next EUBS Annual Scientific Meeting which will be held in Brugge, Belgium, September 4-8, 2002. For more info visit **http://www.eubs.org/eubs2002_1.htm**

This issue presents a lot of EUBS history. With the invited presentations made by Bob Bornmann and Don Chandler at the EUBS Annual Scientific Meeting in Hamburg it creates a bridge from the past to the future of our Society. Therefore this issue does not leave enough room for many scientific papers. This will be different in the spring issue coming up, which will contain the Proceedings of the 3rd Hamburg Symposium on Occupational Risks in Hyperbaric Tunnelling and Commercial Diving. You can expect a highly scientific and huge issue full of valuable material.

The winning paper of this years Zetterström Award "NEUROPROTECTION BY THE USE OF HYPERBARIC OXYGEN AFTER PERMANENT FOCAL ISCHEMIA" by Holger Schade et al. will hopefully be soon available for publication in the Journal. The authors had submitted the paper to a neurology journal with significant impact and momentarily they are waiting for the review. However, we have already requested the permission to reprint the paper in the EJUHM. You should be able to find it in the summer issue.

The Diving seminars at the World Congress on Drowning to be held in Amsterdam 27-29 June 2002 will cover important topics relevant to diving medicine and diving safety! So visit: **http://www.drowning.nl**

At this time I would like to extend my sincere gratefulness to all those who have supported me for the past year with the Journal in the editing, by submitting papers or by doing the reviews. Thank you very much indeed!

I wish you all a Merry Christmas and the very best for the New Year.

Peter

MESSAGE FROM THE PRESIDENT

Dear Friends

The events of 11th September are still with us and its consequences will be with us for many years. Its occurrence just days before the EUBS meeting also meant that some of our friends from America were not able to attend. Let us hope that next year's meeting in Belgium will be in a calmer and more carefree world.

I would like to congratulate Dr Uli van Laak and his team for managing to run the meeting so well even if he was forced to make some changes because of what had happened. However the conference was a scientific success with many interesting and thought provoking papers presented. The social part was not lacking and the casual beer night was particularly notable.

A new development is that discussions are under way to set up a federation of international societies in diving and hyperbaric medicine and this is to be spearheaded by the EUBS and the UHMS following talks we had with the Executive Director of the UHMS, Don Chandler.

Such an organization will strengthen our specialty through the creation of a consensus on a number of key matters such as indications and professional qualifications. It was also agreed to increase the co-operation between the two societies, the UHMS and the EUBS by running a column in each other's newsletter.

Well there is a lot to do before next year's meeting, in the meantime I wish you all the best for the coming festivities.

R. Cali-Corleo
President

EUBS FINANCIAL STATEMENT FOR THE PERIOD 1ST JANUARY TO 31ST DECEMBER 2000

INCOME		
Membership	4,599.50	
Corporate Membership	750.00	
Proceedings	308.00	
Interest on Bank Account	220.47	
Total		**£5,877.97**
EXPENDITURE		
Secretarial Fees	600.00	
Newsletter	4,075.71	
Cardnet Charges	326.50	
Travel & Accomodation – Malta	412.92	
Student Grant	213.09	
Postage/Telephone etc	395.30	
Total		**£6,023.52**
Expenditure over Income		**£ 145.55**

Bank Balance	
Account Balance as at 1 January 2000	£13,974.41
Stamp Stock and Cash in Hand at 1 January 2000	0.00
	£13,974.41
Less Expenditure over Income	145.55
	£13,828.86
Account Balance as at 31 December 2000	£13,604.16
Stamp Stock and Cash in Hand at 31 December 2000	224.70
	£13,828.86

To come off for 2000

Website	£250
Proceedings – Malta	£853

AGA LINDE HEALTHCARE HBO AWARD 2001 GRANTED TO TWO RESEARCHERS FROM GERMANY

In co-operation with the Association of German HBO Centres (Verband Deutscher Druckkammerzentren, VDD) AGA Linde Healthcare GmbH & Co. KG (Unterschleißheim, Germany) has granted the HBO Award of the year 2001 to Dr. Claus-Martin Muth (University Hospital Ulm, Germany) and Dr. Martin Koschnick (BG Unfallklinik Ludwigshafen, Germany). In their research work both scientists investigated the application of hyperbaric oxygen for the treatment of diabetic wounds in an animal model.

Dr. Muth and Dr. Koschnick could clearly demonstrate that hyperbaric oxygen can compensate for negative effects on wound healing which are very often linked with diabetes mellitus as a chronic systemic disorder. Furthermore their study shows that at least in the animal model used for the experiments (Sprague Dawley Rats) HBO therapy is much more effective than clinically accepted treatments like standard moist-wound therapy with or without additional application of hyaluronic acid

The HBO award for German-speaking countries which is granted since 4 years on a yearly base honours excellent scientists active in the field of HBO therapy, from basic experimental and theoretical research up to clinical studies and applications. More information as well as application forms for 2002 are available at AGA Linde Healthcare GmbH & Co. KG, Edisonstrasse 2, 85716 Unterschleißheim, Germany, and VDD e.V., Cuno-Niggl-Strasse 3, 83278 Traunstein (Germany).

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EUBS MEETING 2001

Lee Greenbaum Jr.

One could very easily give credit to the meeting chairman (Secretary General) Dr Ulrich van Laak for selecting the loveliest city in Germany to hold the annual EUBS meeting. The weather god must have recognized and approved his selection because we were blessed with near-perfect weather. The location of the convention hotel (Hotel Intercontinental) added to the pleasantness of the meetings because it was one half block away from the Außenalster Lake, a lake surrounded by lovely parkland with bike and walking paths. In late afternoon the lake was always busy with sailboats and rowing shells.

Just prior to official registration and the opening sessions, the World Trade Center in New York and the Pentagon in Washington, DC were wrecked by terrorists. Some of the members from the United States who had planned to attend were prevented from attending because all airports in the U.S. were closed. Those U.S. members who departed before tragedies had their warmed by the very sympathetic comments and concerns of our European friends. The U.S. consulate that was located an the lake front and within easy walking distance from the convention hotel was busy with very somber and respectful Hamburg residents who continued to file the consulate day and night laying flowers at the front entrance and standing in line to sign the visitor book. Any U.S. visitor who happened to walk by had to be deeply moved by the loving concern.

This meeting, as with most EUBS annual meetings included a special scientific symposium. This symposium, The Third Symposium on Occupational Risks in Hyperbaric Tunneling and Commercial Diving was organized by Dr Birger Neubauer of Hamburg. The symposium was held in the lecture hall of the famous Bernhard-Nocht-Institute for Tropical Medicine which overlooked the port of Hamburg near the site of the first Elbe tunnel that was constructed in 1910. The topics covered were wide ranging, including discussions on hyperbaric tunneling in contaminated grounds, breathing gas contaminants, welding fumes, diving in chemically contaminated waters and contaminations resulting from pyrolysis. It is our hope that this very informative symposium will be published and made available to those people who were unable to attend.

The diving physiology session was opened by a paper by Nossum and Brubakk from Trondheim, Norway. The investigators developed a technique that employed tissue silver staining combined with image processing to quantify the precise amount of mechanical damage in the endothelial layer of blood vessels following exposure to intravascular bubbles. This exciting new method may serve as a major contribution when attempting to determine the mechanism(s) that lead to a reduction in the endothelial response when exposed to intravascular bubbles. Investigators (Leni, Menu, Laforest, Zouani and Meliet) from Toulon exposed male rabbits to pressurized air atmospheres (500 kPa and 100kPa) for 25 minutes. One group of rabbits were given furosemide (5 mg/kg, im) prior to compression. Evoked potentials were used to record immediate changes in neural transmission. The authors were able to demonstrate a preexisting iso-osmotic dehydration that coincided with evoked potential latencies following rapid decompression. It was felt that dehydration may be a major contributing factor but not the sole cause of the altered nervous system. It was pointed out that a major weakness in the study was the lack of pathologic data.

A study in which recreational divers were exposed to wet and dry atmospheres at 50 meters (0.6 Mpa), Mutzbauer, Gruenes, Neubauer, Lorenz, Weiss, Schneider and Tetzlaff were able to demonstrate the there was no effect on erythropoietin levels in plasma. There was no evidence that water immersion played any role as a co-factor for erythropoietin production.

The recent loss of the Russian submarine in which there were no survivors has tended to highlight the need for more useful data on safe escape procedures for the captive crews. Using goats, Gennser, Blogg, Loveman, Seddon, Thacker and White compressed the animals to 25 ATA. The goats were allowed to breath air or gas mix of 60/40 oxygen/nitrogen through an oro-nasal mask during the rapid decompression. Immediately following the return to atmospheric pressure, they were given air to breathe. No convulsions were seen in any of the oxygen/nitrogen mix animals and no changes in breathing frequency were noted. Bubble scores from precordial Doppler were identical in both animal groups. Bubbles disappeared more quickly after the ascent in the hyperoxic animals. Schabana, Hamich, Radermacher, Muth and Paulat modified an ultrasound device (Smart Dop, DWL Elektronische Systeme GmbH) that is employed to measure cerebral blood flow but in this instance it was used to record bubble presence and blood flow in the submerged diver. It was thought that the equipment might be used to evaluate diver safety during decompression, in addition, to gain some insight about the role of a patent foramen ovale during diving.

It is interesting to note that in thirteen experienced recreational divers, five of whom had patent foramen ovales, no increased incidence of changes in cerebral white matter was seen. Farkas and collaborators employed MRI to evaluate any possible cerebral abnormalities. No subjects were older than 40 and there was no evidence of cardiovascular disease and decompression illness prior to the initiation of the study.

The possible relationship of patent foramen ovales (PFO) and changes in the central nervous system continues to perplex the diving community. Another study by Koch,

Wie, Kampen, Bettinghausen, Rieckert and Tetzlaff in which they studied fifty healthy professional and well-trained recreational divers with no history of DCI, stroke or cardiac failure, PFOs per se did not indicate that there was an increased incidence of cerebral lesions in healthy divers who never experienced symptomatic DCI II. However, the study did demonstrate an age related effect, as influenced by the number of dives, on the incidence of brain lesions. The presence of brain lesions were detected with MRI and independent evaluators were employed in the PFO and MRI recordings.

Arterial blood gases during breathhold diving were recorded by Calcia, Pittner, Schabana, Hamich, Radermacher and Muth. The blood gases were sampled at 20 msw. Descent and ascent times were one minute and the bottom times were two and 3 minutes. The arterial pO2 was equal or the same as theoretical values. The increase of pCO2 was less pronounced than might have been expected from measurement of alveolar gases. The combined influences of breathhold, valsalva maneuver and intensive exercise on heart rate were studied by Hoffmann, Smerecnik, Buttgereit and Leyk. Sixteen athletic students exercised on a cycle ergometer in the supine position and breathhold and the valsalva maneuver were performed during exercise. The heart rate decreased within the last seconds of the exercise with a minimum immediately during recovery. This was then followed by a second maximum and minimum heart rate. The investigators speculated that vasoconstriction led to mean blood pressure increase which was compensated for by a decreased heart rate.

Naraki and Mohri from Yokosuka investigated the risk that divers face following diving by flying or driving to hypobaric environments. Rats were allowed to saturate at a pressure equivalent to 30 meters, viz 150 minutes and were then decompressed at a rate of ten meters per minute. Time intervals of 1, 5, 10, 20 and 30 minutes were allowed to elapse before decompression to varying hypobaric environments equivalent to 500, 1000, 1500, 2000, 2500 and 3000 meters. The rats were kept in these environments for 30 minutes. Following recompression, they were observed for signs and symptoms of DCI. A high level of incidence of DCI was noted following residence at 1500 meters for short surface exposures but no DCI for surface intervals longer than 20 minutes.

Based on previous studies by Marroni, et al., that demonstrated that post dive high bubble grades may be directly to fast to medium half time tissues, computed venous pN2 greater than 1100mbar and leading tissue pN2 greater than 80% of the allowed M value, the investigators attempted to identify bubble-safe profiles. Three square dive profiles were selected: a single dive to 20m for 60 minutes with ascent times that ranged from 17 minutes 50 seconds to 35 minutes 25 seconds. The second group included single dives to 40m for 10 minutes with ascent times varying from 4 minutes to 17 minutes 15 seconds. The remaining group included a series of repetitive dives to 30m for 16 minutes with a surface interval of 75 minutes. Doppler recording was carried out every 15 minutes post dive and all dives were made according to the original Zh-L8 ADT model. The introduction of the Proportional M-Value Reduction Concept (PMRC) to the fast and medium-slow HAT tissue compartiments eliminated the occurrence of significant post dive detectable gas emboli in the fourteen volunteers.

In another study by Marroni and coworkers on 575 volunteer divers in which Doppler recordings was used to monitor venous gas emboli where about 33% of the dives were in the range of 20 to 30 meters. However, overall depth range varied from 5 to 65 meters. In an unexpected finding, high bubble grade recordings appeared to be related to skin cooling with higher signals fro skin temperatures 0f 26.5 – 27°C and low or absent signals for skin temperatures of 29°C.

As in previous meetings, there has been a paucity of experimental papers in the hyperbaric oxygen sections of the meetings. However, the first paper to be presented in the session was an excellent experimental study by Hjelde, Hjelstuen, Thom and Brubakk on the effect of hyperbaric oxygen (HBO2) on neutrophil accumulation in ischemic cerebral tissue. Permanent ischemia in the rats was produced by middle artery occlusion for four hours. In one group of rats HBO2 (100% O2 at 2 ATA for 230 minutes) was administered ten minutes after MCA occlusion. The other group of rats were not exposed to HBO2 and served as controls. MRI was used to assess the efficiency of HBO2 treatment. Destructive neutrophil (PMN) levels were determined with the enzyme myeloperoxidase (MPO). The investigators found an increase in MPO levels in the HBO2 treated rats leading them to conclude that in the clinical area, HBO2 cannot be recommended for the treatment of permanent brain ischemia.

Alterations of arterial blood gases after HBOT in critically ill patients was monitored by Ratzenhofer-Komenda and associates at the Univerity Medical School in Graz, Austria. The study was based on the clinical observation of a decline in oxygenation after hyperbaric oxygen therapy. The patients either were being treated for necrotizing fasciitis, burn injury, CO poisoning and major abdominal surgery. All subjects were mechanically ventilated and received analgesic medication or were sedated. HBOT was administered at 2.2 ATA for 50 minutes. Arterial blood gases were monitored along with heart rate and body temperature. Median arterial oxygen tension decreased by 23% in hour one and by 15% in the second hour. Arterial oxygen tension decreased and alveoloarterial tension difference increased in the early period of HO2 exposure. The authors suggest that there may be ventilation-perfusion inequality which seemed to be reversible as the movement to baseline continued. It was suggested that because the subjects were ventilated, carbon dioxide was unable to regulate the ventilation.

A study from the Duke University (Demchenko, Oury, Crapo and Piantadosi) investigated the possibility tha NO released from cells may be responsible for the increased sensitivity of the CNS to oxygen toxicity. Mutant mice were used and recording electrodes were stereotactically placed in the substantia nigra, caudate putamen, hippocampus and the parietal cortex. A microdialysis probe was placed in the caudate and was continuously perfused with artificial CSF. The mice were compressed

to 5 ATA and breathed 100% oxygen. CBF was measured every 15 minutes along with EEGs. In addition samples of the dialysate were also collected. The collected data suggested that SOD3 plays a unique role in the vasculature to efficiently scavenge superoxide in very specific extracellular regions. Vascular SOD3 is located strategically between the endothelium and smooth muscle. NO becomes effective by exerting its influence through the red cells and endothelium to stimulate smooth muscle relaxation. SOD3 appears to be involved in sensitivity to CNS oxygen toxicity by inhibiting oxygen mediated inactivation of NO and CBF.

In the clinical area of hyperbaric medicine, most of the presented papers were case reports ranging from the treatment of cerebral palsy, Crohn disease, iatrogenic air embolism, faecal incontinence and necrotizing fasciitis. The presentation by Neubauer from Florida on the treatment of cerebral palsy with hyperbaric was in essence a repeat of a presentation that was made in Malta. The general focus of the paper was on the use of sequential SPECT imaging in brain injured children. In addition to a brief discussion on the use of SPECT, a film was shown on six cerebral palsyied children who were treated with hyperbaric oxygen, cases that were selected from a large volume of treated patients. A treatment protocol was not given, viz standardized performance measures before and after treatment. Independent evaluators were not used and there was no presentation of statistically analyzed data. The use of SPECT alone is valueless unless supported by data on brain metabolism. This would have required simultaneous sampling of arterial and jugular blood. The flows may have been altered during or just following HBO2 treatment but were there concomitant changes in brain metabolism? SPECT provides relative measures of blood flow (perfusion) but cannot give information on absolute blood flow, i.e. the level of perfusion. Therefore it cannot be used to measure cerebral metabolic rate, changes of which would be crucial for an understanding of the effects of HBOT. It was felt by the reviewer that if the plaguing issue of success or failure of treating brain injured children with hyperbaric oxygen is to be honestly settled, a large multicenter clinical trial with a rigid protocol will be required.

There were a number of wonderful social events to entertain the members and their spouses but the final banquet aboard the steel hull windjammer Rickmer Rickmers was the most memorable event. It is a stately three master, 97 meters in length and at one time she carried 3,500 square meters of sail. Her hull was laid in 1896 in Bremerhaven and a lot water passed under her hull over the years with passages around Africa and eastern Asia. A wide range of wonderful food and wines were served in the very bright and comfortable lounge or ship's wardroom.

The Secretary General and President of Gesellschaft für Tauch- und Überdruckmedizin, Dr Ulrich van Laak deserves a lot of credit for arranging and then overseeing the twenty seventh meeting (30 anniversary) of the European Underwater and Baromedical Society. One could easily say that the meetings were "smooth", every detail was considered. The Proceedings were superbly done; the printing was uniform throughout and there was a direct correlation of the meeting agenda (table of contents) and the papers as presented. It certainly is a model for the future production of meeting proceedings. Thank you Uli.

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Further copies of the Proceedings (ISBN 3-88312-132-0) of the EUBS meeting in Hamburg are available from: Verlag Schmidt&Klaunig, Ringstr. 19, D-24114 Kiel, Fax: +49-(0)431-6606424. Price is € 85,- incl. S&H.

UHMS holds successful new style meeting in San Antonio

R.W. Bill Hamilton

The Undersea and Hyperbaric Medical Society had a hard act to follow in picking a venue to follow the great meeting in Stockholm in 2000, and San Antonio did a good job. This year's meeting, 2001 June 13-16, drew an impressive 500 attendees. The quality of a meeting is not only how many choose to attend, but whether those attending are the leaders, the "movers and shakers" in the community; in my opinion this year they were.

There were several things unique about this year's meeting. One was that it was done by a totally new UHMS staff. Following the retirement of Executive Director Lee Greenbaum and his replacement by Don Chandler, the Society's experienced meeting planner Jane Dunne also left, and this was followed shortly by the departure of Denyse Spence, the principal secretary and pivot point of the UHMS office. And three others not so much involved in the Meeting have left UHMS as well; Hilda Auricchio retired, Ann Barker our chief editor went into a semi-retirement contract status, and Nancy Rufty Schandelmeier has stepped down as Editor of *Pressure*. Don's right hand woman is now Rosana Enamorado, and led by the two of them the new staff put together a well organized meeting. A very useful organizational tidbit was an up-to-date listing of all the committee meetings and their locations, making it easier to for participants to juggle all these times and places.

San Antonio was a nice place for the meeting, and although it was warm and somewhat humid outside, there was a delightful Mexican color and rhythm that was part of the town, the food, the many great restaurants, and the entertainment. Add to that some sheer Texas character exemplified by the artifact-and trophy-laden Buckhorn Saloon where the Associates held their "roast" of Paul Baker; actually they had Texas barbecue, not roast. I

remember being completely awed by the Buckhorn when it was a downtown saloon and I was much too young to even consider buying a beer there. The UHMS Associates along with the Baromedical Nurses Association had a great pre-program also, and their ongoing sessions afforded stiff competition to the main program.

This year's pre-program on the Mechanisms of Decompression Illness carried on a fine tradition, started by David Elliott and now organized by James Francis, addressing several DCS topics not covered previously. These included hypotheses for limb bends and skin bends, cardiopulmonary DCS (chokes), and spinal DCS with proponents of the 3 leading hypotheses, and various modes of ear barotrauma and "squeeze."

Another great pre-program was that on Patient Safety organized by Paul Barach and Peter Mueller. In covering the "safety" topic it provided many useful aspects of chamber operation. Those who attended learned a lot about how to operate a chamber, safely.

The presentation format was very different this time. All papers were presented as posters distributed around the room, and then after about an hour each presenter (or in some cases selected presenters, by vote or otherwise selected by the chairmen) gave a short oral discussion of the paper, with questions. Although a few seemed willing to give this method a chance, my assessment of the crowd was that very few of us really liked it. (From the published plans for the next meeting we had better learn to live with it.) A major complaint was that it was not possible to determine when a given paper was going to be discussed, making it nearly impossible to "session hop" and hear selected papers from the three sessions going on at the same time.

Looking forward to doing this again, it would be a lot more effective if the oral presentation times could be scheduled specifically (of course the chairmen will need klaxon horns or big long shepherd's crooks to maintain the schedule), and if all sessions could follow the same pattern. Since all rooms will have LCD projectors the schedule could be posted on the screen and kept updated. It will work better if the chairs are clustered in the middle of the room but accessible, leaving room in front of the posters. Lighting has to be planned well, ensuring that both posters and screen can be seen. The method does have the advantage that one can study the papers of greatest interest in more detail, talk to the authors personally, but still perform the "peer review" function of oral presentations by asking incisive questions in the public forum. For next year we will have to prepare our papers more carefully, with a good poster and a few well-designed summary slides.

Perhaps the most unusual poster was one on "BOWLING AFTER DIVING: ARE THERE SAFE LIMITS? PROJECT BOWLING SAFETY"; it was not on the official abstract list or schedule but was interesting nonetheless. Neil B. Hampson and Richard G. Dunford described a case of thumb bends that occurred on bowling after diving; whether this could be attributed to bowling was not certain but their analysis was interesting. It's time bowling got its own poster!

One of my duties in writing up the annual meeting is to provide some critique. The format is discussed above. A major glitch in my eyes (and heavy eyelids) was a severe deficit of coffee. There was a nice spread of sweet rolls, fruit, etc., early in the morning, but when that coffee ran out it seems that's all there was. None was provided in the afternoon. Meeting Planners take note! We like coffee in the afternoon!! In fact, since most folks get a little sleepy after lunch, an ample supply of coffee hits the spot from then until the end of the program. Another planning glitch is that we lost most of the cocktail hour before the banquet. Just after the bars started operating the doors to the banquet room were opened and the crowd dispersed to claim the best seats, putting an abrupt end to most conversations. This is easy to fix: the doors to the banquet room should stay closed until the appointed hour. This was even worse at the Boston meeting, by the way, because that time there was the additional problem that the bar service was inadequately matched to the thirst of the crowd.

An important aspect of each meeting is to recognize accomplishments of our colleagues. This year the Albert R. Behnke Award went to Mike Bennett of Australia, the Craig Hoffman Award to Tom Workman, the Charles W. Shilling Award to Oskar Ehm, and the Paul Bert Award to John Feldmeier, among several others. It might be noted that Mike Bennett had an awesome cheering section of fellow members from Down Under. The service of Lee Greenbaum as Executive Director was recognized; Lee was at the controls when the Society went from a cigar box accounting system to a computerized one, and into a building owned by the UHMS (Lee sweated this huge mortgage, but it was a good call). The Borema Award, which is actually not a UHMS award, went to Michael Strauss. Appropriately, Dr. Strauss had 16 papers in this meeting, far more than anyone else.

The meeting had good international representation, especially from East Asia and South and Central America, with the usual good northern European participation. About half the papers were from U.S. labs. Considering the general lack of research support, diving is almost holding it's own, with 75 diving to 96 HBO_2 papers by my count. It seems to me that the HBO_2 papers are digging more into fundamental science than before, itself a good sign for the Society. I was glad to see a couple of papers dealing with iatrogenic embolism, a condition that is not treated nearly often enough.

We cannot finish without mentioning the First UHMS International Golf Classic, which deserves mention here because of our Editor Peter Mueller's distinguished achievement of taking the most strokes for a single hole; the actual number is classified, but it is distinguished. That's encouraging: I may play next time.

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Dear Bill, I'm looking forward to playing with you soon! ☺ **Peter**