

Greetings
from Dartmoor

BMUS
STUDY DAYS

2017 ASM
Update



**LOVE YOUR
SCANNER**

**Grumpy Old
Ultrasound
Consultant**

HEALTH AND EDUCATION

Moor News - Greetings From Dartmoor

By the time this newsletter is published, registration for the BMUS Annual Scientific Meeting will be open. In keeping with the recent tradition of visiting sporting venues, Cheltenham Racecourse will host the BMUS 2017 meeting from 6-8th December.

Most appropriately the town's motto is "Salubritas et Eruditio" meaning "health and education" which further boosts confidence that this will be an excellent meeting. Peter Cantin and the scientific organising committee have produced an exciting and varied programme, delivered by a faculty of expert and experienced ultrasound specialists, which will entertain and educate you regardless of your experience and ultrasound interests.

The social programme will include the Gala Dinner at the famous Pittville Pump Rooms where water from the spa, that first made Cheltenham a famous and fashionable town, can still be sampled. Those of you that have not previously visited Cheltenham will also be able to enjoy a historic regency spa town in an area of outstanding natural beauty. I hope that as many of you as possible will be able to attend the meeting to enhance your professional development, meet old friends and make new ones.

In addition to the ASM, BMUS has delivered a successful year of regional study days including another well attended meeting in Dublin. Details of upcoming study days can be found on the

website; of note the programme for the obstetric study day on 13th October in Birmingham is now available and online registration open.

The BMUS science and education committee are planning the study day programme for 2018 which will include both core and specialist topics, if there is an area of ultrasound that you feel needs a study day that isn't currently provided, BMUS would like to hear from you. Have you ever thought of running a study day yourself, BMUS can provide extensive support and expertise to make this an enjoyable and rewarding experience (honest!), please get in touch with the BMUS office for a chat.

In the background there are continuing developments regarding a new career framework for sonography, led by Health Education England and Skills for Health. This may result in a profound change in the future of sonographic education and career progression. Whilst this carries some threats, there are also opportunities to establish a sustainable career structure for the sonographers of the future and hopefully also the impetus to formally register sonography as a recognised profession. BMUS is providing expert opinion in these discussions ensuring that the views of those that actually deliver the service are heard by policy makers. The BMUS professional development officer, Pam Parker, is leading this work on your behalf. BMUS has also updated a number of

policies, statements and guidelines to assist you in your professional practice which can be found on the website. Under current consideration by BMUS is the use of prescribable medications by sonographers in their diagnostic and interventional ultrasound practice. We hope to issue a statement on this topic in the near future. At a time of great uncertainty and instability in healthcare, BMUS will continue to fight for maintenance of the highest standards in ultrasound education and practice. If you have colleagues who are not currently BMUS members please encourage them to join us at this critical time.

Finally as the summer holidays are upon us I hope that you will all have the opportunity to take some time away from work for a well-earned rest and chance to recharge your batteries. As I write this column at the beginning of July the forecasters are still predicting a summer heat wave; although a long summer will be welcomed perhaps we should be cautious of placing too much faith in predictions as other predictions for 2017 include a world-wide pasta shortage, a cure for many diseases found in a druid manuscript buried in an English cavern and a "love triangle" around the White House! I wish you all an enjoyable summer and hope to see you in Cheltenham later this year.

Simon Freeman

BMUS President



Grumpy Old US Consultant

Your correspondent was passed a very grumpy letter from a GP last week. The GP had been in receipt of an US report which identified a small hypochoic lesion in a fatty liver and suggested the findings be discussed with a radiologist.

GP not happy. GP had not asked for a scan by a "technician who could not interpret the scan findings" and expected any radiology consultation to take place before the result was issued not afterwards!! The sonographer was not at fault. Efforts to get an opinion were frustrated by circumstances and the report issued after several days delay.

What obligation is there on an US department or independent operator/service to provide formal radiological interpretation? Is a sonographer more than a technician? The term was clearly used in an offensive manner by the upset GP.

The elephant in the room is that obtaining images is a lot easier than interpreting them but we have allowed US services to expand as if the room contained no elephants.

This particular scan request was provoked by abnormal liver function tests and a hint given of possible alcohol excess. The patient is male, over 70, with no past history given. No question of malignancy raised.

Against a fatty liver an haemangioma may appear hypochoic (look for posterior acoustic enhancement as a clue). In a young female patient I would issue a report as follows:

In the absence of a known or likely primary tumour, this lesion is almost certainly an haemangioma and further investigation not required.

But this patient has both age and risk factors (probable Alcohol Liver Disease) for cancer. So is a CT unavoidable – probably, but it is not unreasonable for the GP to be asked to do a full clinical review and relevant bloods (including AFP alpha-fetoprotein) first. This way the correct imaging may be protocolled. Also the patient may be asked if they want investigations for cancer (too often this is assumed to be a given).

Back to the other elephant in the room. Lots of GPs are now requesting CT and MR on the basis of US scans provided in the community by people we don't know, on equipment we don't assure, with neither reports or images available to assess as part of vetting the request. The request offers little or no clinical information other than "US found X or Y".

None of this is improving the reputation of US as an authentic diagnostic tool, which is at risk of becoming just a way of distracting the worried well until a "proper " scan can be arranged.

What are you going to do about it?

2017 ASM Update

This year seems to be going past at a frighteningly fast pace and the Annual Scientific Meeting is now looming large (although it still is difficult to think about December before summer holidays are upon us).

Preparations for the ASM are going well. The finishing touches are being applied to the scientific programme and the guest speakers are now being formally invited. The Call for Papers was issued during May, abstracts have been received throughout June and July and judging will take place during August. The successful authors will be advised of the acceptance of their work towards the end of August once judging has taken place. BMUS has always had a great response for those wishing to showcase their work by either oral or poster presentation and I am sure that this trend will continue this year.

This year has also seen the very sad deaths of two giants of the ultrasound world. Professor Peter Wells and Professor David Cosgrove both passed away this year. We have already put plans in place to ensure that they are both remembered at this year's meeting. Dr Mike Halliwell has kindly agreed to give a lecture in honour of Peter Wells during the physics sessions and Dr Adrian Lim will be giving a lecture dedicated to David Cosgrove during the abdominal sessions. Both lectures will celebrate the enormous contribution which both Peter Wells and David Cosgrove have made to diagnostic ultrasound over the years.

The floor plan for the equipment exhibition has now been completed. One of the major advantages of the Cheltenham venue is the exhibition hall which is a huge space that has been set aside for the equipment and poster exhibition. The exhibition will be a fantastic space giving excellent opportunities to meet up with old friends and colleagues and to admire the latest equipment on display from our commercial partners.

I am looking forward to welcoming you all to Cheltenham in December.

Peter Cantin

2017 Scientific Organising Chair





(18 May 1938 – 16 May 2017)

David Owen Cosgrove, “Doc” to his friends, of Wimbledon, London, UK, lost his battle with cancer on Tuesday the 16th of May 2017, at St. Raphael’s Hospice, North Cheam, London. Professor Cosgrove died two days short of his 79th birthday. He was born on the 18th of May 1938 in Nairobi, Kenya, the son of Alfred Owen Cosgrove (born 1901 South Africa, BSc Electrical Engineering, Cape Town University, died Nairobi 1962) and Kathleen Mary Cosgrove (nee Carlisle, born South Africa 1908, secretary, died Nairobi 1967). He is survived by his brother John Philip Carlisle Cosgrove (born Nairobi 1945), financial accountant and retired United Nations Official, and by his partner Zhen Li (Jason).

David went to a number of good schools in Kenya, culminating in his secondary education at the Duke of York High School, where he was Head Boy. This is now known as Lenana School (https://en.wikipedia.org/wiki/Lenana_School), situated outside Nairobi at the foot of the Ngong Hills near the village of Karen, named after Karen Blixen author of “Out of Africa” (details: http://www.mccrow.org.uk/eastafrica/duke_of_york_school/Duke_of_York_School.htm and <http://www.oldyorkist.com>). The 1985 film of the same name gives a good impression of the surrounding countryside that formulated David’s early years.

When David was at home in Nairobi for school holidays, he and his brother John would go on various trips to game parks and the coast. John recalls that this was where he learnt of David’s strong interest in, and great deal of knowledge of, almost

Obituary: David Owen Cosgrove

everything, but in particular nature: “David had a major positive influence on my life in the appreciation of flora and fauna. He also taught me about classical music, a great love of his.”

David graduated from high school in 1955 with “A levels”, ready for university entrance. His parents had the foresight to understand that David was exceptionally gifted and they supported his wish to apply to Oxford University, with his mother working to pay for his fees, which were then as now considerable for an “overseas” student. At age 17 David left Kenya, passed the Oxford University entrance examination and went on to obtain a BA in Physiology from Oxford (1961) and subsequently a BM BCh (Bachelor of Medicine, Bachelor of Surgery - *Medicinae Baccalaureus, Baccalaureus Chirurgiae*) at St. George’s Hospital Medical School in Tooting, London (1963). After working at several hospitals in London he returned to Kenya and practiced medicine at the Jomo Kenyatta Hospital in Nairobi (1971). He soon understood that he would be happier and could make a more significant contribution to Medicine in England, the country to which he returned and in which he subsequently remained for the rest of his life, working in medical ultrasound to achieve world renowned standing and advancing his speciality in an unprecedented manner.

The ensuing list of honours and accomplishments in David’s astonishingly successful career are extensive, suffice to say that David’s contributions were immense. The main areas where he substantially advanced the clinical role of “radiological” (i.e. non-obstetric) ultrasound, included improved understanding of the basic mechanisms of the ultrasound image-forming process and of Doppler ultrasound, developed and evaluated ultrasound “tissue characterisation” methods, developed and greatly advanced many clinical applications of microbubble(contrast)-enhanced ultrasound, and demonstrated how to apply ultrasound elastography to clinical diagnosis.

He became a Member of the Royal College of Physicians in 1967 and a Fellow in 1990. He obtained an MSc in Nuclear Medicine, University of London, in 1975. A key

moment in David’s career, and the career of many others, was when he started as a Research Fellow in the Department of Nuclear Medicine at the Royal Marsden Hospital under V.R. (Ralph) McCready, in collaboration with C.R. (Kit) Hill in the Institute of Cancer Research, who together had a Medical Research Council programme grant to develop and evaluate investigative ultrasound methods. At that time in the Royal Marsden Hospital, patients were scanned with ultrasound in the Nuclear Medicine Department as interest in ultrasound started there, prior to any radiology interest, whilst still an emerging diagnostic modality in cancer medicine. David moved this work forward in his characteristically professional way. He stayed in this area of medicine and research for the remainder of his career, making such an important and sustained contribution to investigative radiology that most people assumed he was a radiologist. In 1998 the Royal College of Radiologists recognised this by inviting him to become an Honorary Fellow.

The team at the Institute of Cancer Research and Royal Marsden Hospital at this time built its own ultrasound scanners for clinical use (with the new “grey scale” imaging method), and had a collaboration with EMI Central Research Laboratories. At the time, EMI was the world’s largest producer of vinyl records, but had also pioneered airborne radar, commercialised television and developed the x-ray CT scanner from the Nobel Prize winning invention that Godfrey Hounsfield had made while working there. During the late ‘70s and early ‘80s EMI were also a leader in medical ultrasound. They had built, in part with David’s advice, one of the early commercial phased array abdominal ultrasound scanners.

He had a deeply intellectual approach, and a tremendous curiosity, particularly about the ultrasound physics related to his many observations of imaging phenomena in clinical ultrasound practice, and how best to explain them. At joint clinical-physics meetings he would bring (initially) Polaroid photographs and (subsequently) video tapes of recent cases which he used to challenge physicists, to find an explanation of some observed phenomenon.



Probe out of view, control console on the right of the picture.

David (circa 1983), holding the probe of a radically new real-time phased array abdominal ultrasound scanner (code named at EMI CRL as the "Falcon"), a prototype being evaluated in comparison with the home-built ceiling-mounted static B-scan system "Icarus"

In 1993, after a tremendously successful period at the Royal Marsden Hospital (Consultant in Nuclear Medicine and Ultrasound from 1977), David moved to the Royal Postgraduate Medical School at the Hammersmith Hospital. This later became a part of the Imperial College School of Medicine, where he was awarded a personal chair as Professor of Clinical Ultrasound. He may have been happier with the moniker 'Professor of Bubbles'; during this time he was at the forefront of developments in the use of microbubble contrast agents in ultrasound imaging. He co-founded the International Contrast Ultrasound Society (ICUS) in 2008. He was an active and highly valued contributor to weekly Engineering and Physics ultrasound meetings until very recently.

After David 'retired' in 2004, becoming Emeritus Professor at Imperial College, he took a new role as a Senior Research Investigator at King's College Hospital, and generously continued weekly clinical sessions at the Hammersmith and Charing Cross Hospitals. At King's, he immersed himself into paediatric use of microbubble contrast to establish once again in his career a new direction for ultrasound. He was actively publishing new reports in this field at the time of his death. At Imperial he also remained an active senior investigator, bringing together physicists, engineers, radiologists and clinical teams with his insight for studies of clinical applications of new ultrasound technologies.

Although David published more than 200 peer reviewed research articles and 30 teaching books/book chapters over his career, teaching is something for which David will be particularly remembered, much conducted at a very personal level. His talent for clarity, when summarising or explaining anything, combined with his gentleness and patience, made him a magnet for trainees from around the world. Over the decades he inspired a small army of individuals, both clinical and technical, many of whom have gone on to have successful careers and take up leadership roles in clinical, academic and commercial institutions. This built

him a world-wide network of friends who held him in great esteem and with considerable affection, in Europe, Japan, North America, South America, India, China, Russia, the Middle Eastern and many other countries. He held visiting professorships in Philadelphia USA, Wenzhou China and Hangzhou China, was one of the world's most sought-after invited speakers at international conferences and held honorary memberships in many national and regional ultrasound societies.

David's knowledge, experience and clear thinking meant that he was often asked to take advisory and consultative positions, even in fields outside of his own such as high intensity focussed ultrasound. He was Director, Secretary and Vice President of the International Contrast Ultrasound Society, advisor to NICE and various grant giving authorities, and a member of many editorial boards of journals and expert working groups. A particularly important contribution, which continued throughout his retirement, was his role in advising companies. His advice for product improvement was invaluable, and in return he would be able to work with the very latest and novel products for evaluation and research study. Through his diplomacy and visibly open integrity he was able to engage simultaneously in this way with many companies.

David possessed a deep intellect and was driven by an insatiable curiosity. He also exhibited an intellectual generosity that helped many people, and this was one of the attributes that won him so many friends. He was the "go to" person for objective and thoughtful advice on a great many topics. A modest, kind and gentle person, he valued quietly continuing his work, listening to music, studying the arts and nature (including diving), cooking and spending time with his friends.

A giant of the medical ultrasound world has passed away, unique in so many ways and an inspiration to generations of ultrasound practitioners across the world.

Jeff Bamber, Robert Eckersley, Chris Harvey, Adrian Lim, Paul Sidhu, Meng Xing Tang

BMUS Study Days

The first half of 2017 has been a busy but successful year for BMUS, we have run 6 courses over 3 months, educating nearly 300 sonographers from across the UK and Ireland. The following course were run:

- Gynaecology Study Day
- Course of Clinical Ultrasound For Hepatologists
- MSK Study Weekend
- Head and Neck Ultrasound Training Day
- 4th International Paediatric CEUS Course
- Dublin Summer School

We have received some great feedback from these courses with all being positively received.

'Excellent day. Very applicable to everyday work. Nothing negative to add!'

Gynaecology Study Day,
April 2017

'The speakers and presentations remained focused and didn't waste time covering too many basic topics. The scanning workshops were delivered professionally and with many hands on scanning tips only acquired with years of experience. The information was shared so generously and in relaxed friendly way, it was easy to remain engaged throughout the weekend'

MSK Study weekend,
May 2017

'A relaxed, well presented topic. Also good to try a variety of ultrasound machines. Presenters and facilitators excellent! Nothing bad to say!'

Head and Neck,
June 2017

The office is now gearing up for our autumn programme of courses. We are supporting or running 5 educational days as well as the Annual Scientific Meeting in December. Our autumn programme includes;

- General Medical Ultrasound Imaging Day (5th September, Manchester)
- A study day in partnership with Oxford Hospitals (9th September)
- Leeds Paediatric Ultrasound Course (29th September)
- Obstetrics Study Day (13th October, Birmingham)
- Lincoln MSK Study Day (4th November)

We are also working on our programme for 2018, if there is anything you would like to see on a future programme, email emma@bmus.org

BMUS 2018 Membership Rates

After retaining the membership fees at their current level for the past 3 years, BMUS Council have found it necessary to apply a small increase in line with inflation for 2018. All categories of membership will rise by 2.6% for the membership year commencing on 1st January 2018.

Direct Debit

All membership rates (with the exception of Student Memberships) are available to be paid by quarterly instalments by Direct Debit.

Should you not have already signed up to Direct Debit and would like to change your method of payment; please either contact office@bmus.org and request a Direct Debit form or download the form from the BMUS website at https://www.bmus.org/static/uploads/resources/Direct_Debit_Form_OkRnRgW.pdf

Student Members / Preceptorship Rate

We have also introduced a 'preceptorship' rate for those student members gaining their Postgraduate Diploma. The rate is only available to existing BMUS student members at the end of their first year of membership with BMUS.

Category	Old Rate	New Rate wef 1/1/2018
Sonographer / Doctor in Training / Clinical Scientist /Physicist	£87.00	£89.24
Consultant Sonographer / Superintendant Sonographer / Consultant Clinical Scientist	£99.75	£102.32
Consultant / GP / Radiologist / Veterinarian	£112.00	£114.88
Overseas Member	£130.00	£133.36
European Member	£92.25	£94.64
Student	£38.00	£38.99
Retired / Unwaged / Preceptorship Rate	£65.00	£66.68
Vascular Scientist	£75.00	£76.92

LOVE Your Scanner!

Take a few minutes to do these simple checks to avoid poor quality images and make sure your ultrasound system is functioning at its best

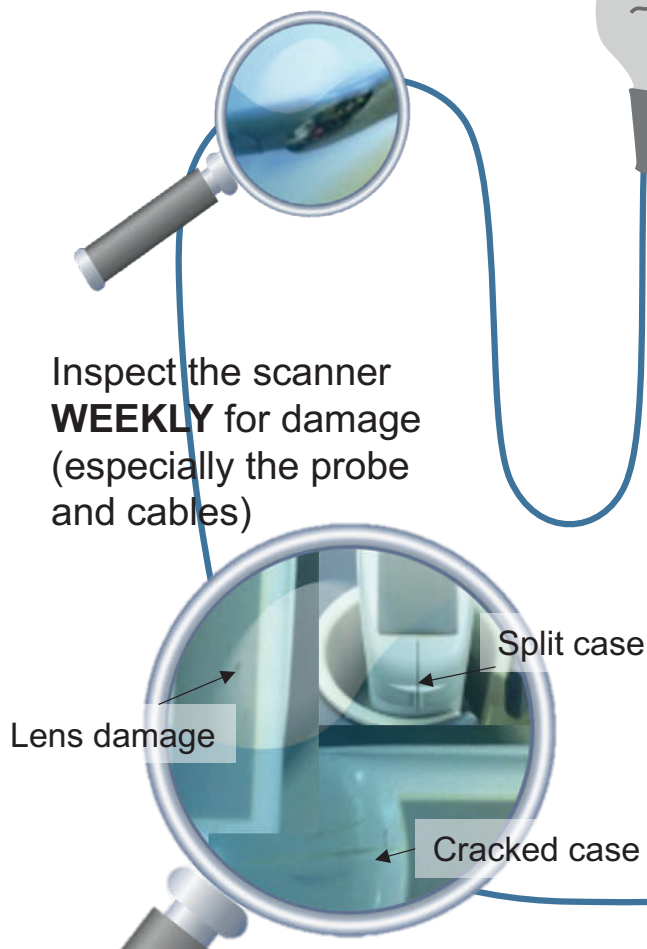


ALWAYS

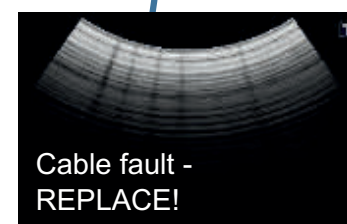
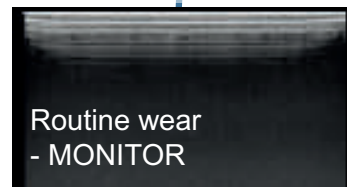
Be kind to your equipment!

- Never drop or bash the probe
- Wipe gently to clean
- Avoid running over cables!

IF a fault is detected:
Risk assess,
Repair, or
Replace as necessary



Perform a **MONTHLY** reverberation check for non-uniformity



The majority of ultrasound equipment faults can be spotted by introducing these simple checks [Dudley and Woolley, *Ultrasound* 2016 24; 190-197]

BMUS Study Days 2017

Each year, BMUS runs a varied programme of study days and events throughout the year. These are spread across the country and differ from year to year.

During 2017 we are running a number of study days that cover core areas such as Gynaecology, MSK and Head and Neck as well as popular areas such as Paediatrics and Abdominal.

All these courses carry BMUS CPD points.

For programme and registration, visit www.bmus.org

September General Medical Ultrasound Imaging

5th September 2017,
Manchester

Oxford Ultrasound Study Day

9th September 2017,
Oxford

Leeds Paediatric Study Day

29th September 2017,
Leeds

October Obstetrics Study Day

13th October 2017,
Birmingham

November Lincoln MSK Study Day

4th November 2017,
Lincoln

December Ultrasound 2017

49th Annual
Scientific Meeting
6th - 8th December 2017,
Cheltenham