

# Consortium for the Accreditation of Sonographic Education

## NEWS

June 2007

This newsletter aims to provide up to date information regarding CASE activities and requirements in respect of validation, annual programme monitoring, and other relevant issues.

Current **CASE Council members** are:

|                 |                |              |      |
|-----------------|----------------|--------------|------|
| Rosie Conlon    | Chair          | representing | BMUS |
| Julie Walton    | Past Chair     | representing | BMUS |
| Rosemary Lee    | Hon.Treasurer  | representing | UKAS |
| Wendy Williams  |                | representing | UKAS |
| Audrey Paterson |                | representing | SCoR |
| Gill Dolbear    |                | representing | SCoR |
| Sue Tennant     |                | representing | BSE  |
| Jan Forster     |                | representing | BSE  |
| Valda Gazzard   |                | representing | SVT  |
| Theresa Fail    |                | representing | SVT  |
| Lynda Mulhair   |                | representing | RCM  |
| Gail Johnson    |                | representing | RCM  |
| Andrew Fairhead | Hon. Secretary | representing | IPEM |
| Crispian Oates  |                | representing | IPEM |

### Parent Organisations:

British Medical Ultrasound Society, British Society of Echocardiography,  
College of Radiographers, Institute of Physics and Engineering in Medicine,  
Royal College of Midwives, United Kingdom Association of Sonographers,  
Society for Vascular Technology of Great Britain and Ireland

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## CASE EDUCATION AND TRAINING SESSION at the BMUS Annual Scientific Meeting & Exhibition: December 2006

During the BMUS ASM 2006 (Manchester), CASE co-hosted a conjoint session with BMUS on issues relating to ultrasound education and training. The subject for this session was Assessing Competence to Practice Ultrasound: The Evolving Needs in Ultrasound Education – Can We Match Service Requirements?

The session was held in the Porters Suite at Manchester International Convention Centre on Wednesday 13<sup>th</sup> December 2005, between 14.00 & 15.30pm. There were some very stimulating presentations from the invited speakers with lively discussion.

Rosie Conlon reported to CASE Council in March that there had been a better attendance at the session than at the 2005 CASE seminar. This was very pleasing and it was encouraging to see about 40 people in the session, including a number of radiologists. As with the previous year, however, it was a little disappointing to see a low attendance from the Programme Leaders of the CASE accredited HEIs.

Rosie extended her thanks to all who were involved in the session including Heather Venables, who presented a very interesting report from the A&E perspective. This group has really taken hold of and expanded their use of ultrasound. Barry Nicholls also gave a very entertaining and passionate talk from the point of view of the anaesthetists. The intensivists/anaesthetists are hoping to follow the example of the A&E group within their own professional bodies.

The question of the session was really 'should CASE reconsider its remit?' The general feeling from both radiologists and non-radiologists was that CASE should take this issue on and take it forwards.

All slides which have been made available to CASE by the Speakers at the 2006 CASE session are also available on the CASE website.

## CASE EDUCATION AND TRAINING SESSION at the BMUS Annual Scientific Meeting & Exhibition: December 2007

CASE is currently planning its session to take place at BMUS 2007. Further details will be available in the BMUS Preliminary Programme, on the BMUS website and in the next edition of the CASE Newsletter. The working title for this session is '**The Sonoscope Approach to Ultrasound**'. A controversial topic covering governance issues, risk assessment, education & training and competency. It aims to cover ultrasound education for **anyone** who is doing it.

## CASE Annual Programme Monitoring Exercise 2005-2006

One of the roles of CASE is quality-assurance of sonographic education and training and this is achieved by annual programme monitoring (APM) of all CASE accredited programmes. All programmes must comply with this process in order to retain CASE accreditation status. This process commences in October each year when the CASE administrator issues the Annual Programme Monitoring Proforma to all programme leaders. This should be returned by the specified date to the CASE Co-ordinator.

All institutions receive an individual response from CASE which details strengths and weaknesses of programmes and details actions required both of the programme leader and CASE.

The outcomes of the APM each year at Institutional level are typically:

- report satisfactory and no further action required.
- minor issues requiring further action/clarification by programme leader/team.
- major issues requiring further action by programme leader/team. In such cases an *INTERIM* visit may be required. CASE Council will nominate a Lead accreditor and occasionally a Co-accreditor to visit the Institution to discuss the issues raised through annual programme monitoring and to facilitate the addressing of issues to the satisfaction of CASE.

Each year, the APM committee produce generic and programme specific information to each HEI. Below is a summary of those aspects of the APMR for the 2005-2006 which are generic.

## CASE 2005 – 2006 Annual Programme Monitoring Exercise: General Feedback

### Statistics on Student figures:

283 students were recruited to the CASE accredited ultrasound programmes. This is a slight decrease on the previous year when 298 students enrolled.

Numbers recruited to all programmes in the 2005-2006 monitoring period.

|                               |            |
|-------------------------------|------------|
| Post Graduate Certificate     | 99         |
| Post Graduate Diploma         | 130        |
| MSc                           | 21         |
| Single Module (where offered) | 33         |
| <b>Total</b>                  | <b>283</b> |

### General Points about the returns:

There were 16 returns from HEIs this year (compared to 17 for the period 2004-05).

The Sub-committee extended its thanks to all programme leaders for making their returns this year. The committee noted a significant improvement in the quality of the information provided by most HEIs for which they are to be commended.

Most Programme Leads made their External Examiner reports available to CASE which is very encouraging and most useful to CASE. It should be noted that, where Universities do not make their external examiners reports available to CASE, this does impact upon the level of scrutiny of the programme as the sub-committee cannot appreciate the wider picture of the course. Therefore, in these cases, the feedback to the HEI was limited.

The sub-committee noted the increasing use of e-platforms for programme delivery and tutorial support and this is considered an example of good and innovative practice.

There were generally high pass rates for the courses, combined with low attrition compared to previous years and CASE commends the Programme teams for their hard work in achieving this.

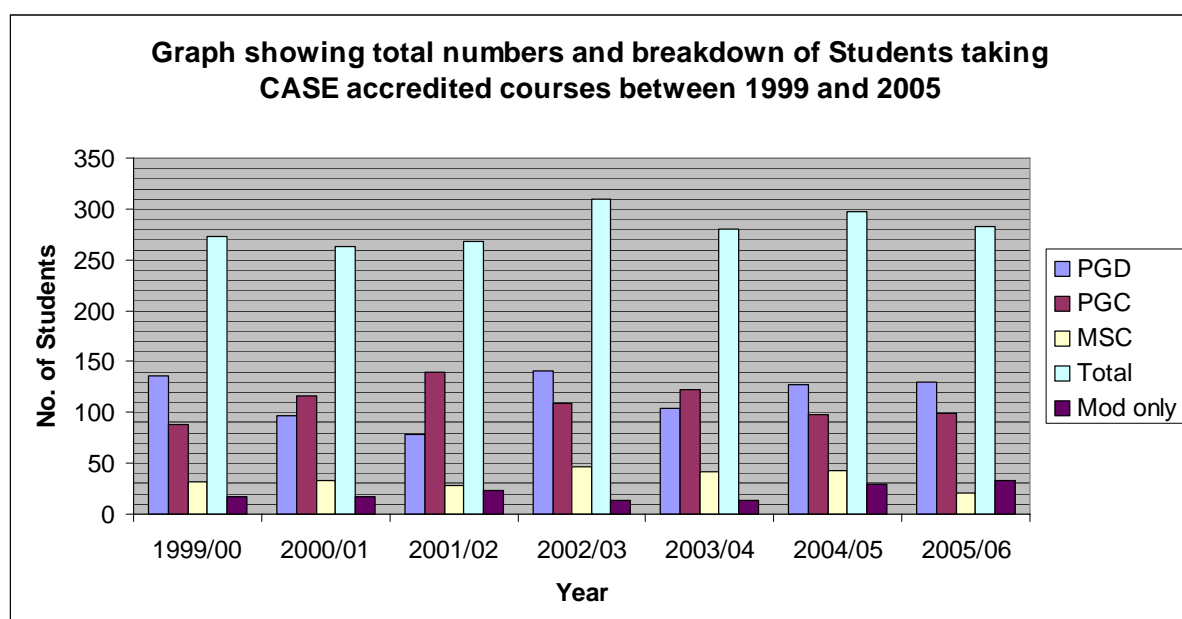
The sub-committee would like to stress that any such major change to a programme must be notified to CASE in advance of the process taking place and CASE involvement in the review is paramount. All HEIs undertaking such review **MUST** liaise with CASE at an early stage to explore how to proceed.

Some HEIs continue to report problems in recruiting due to a lack of clinical placement availability and a lack of mentorship/student support once placements are obtained. This is reported as due to the staffing constraints in the NHS affecting student training and progress. However, encouragingly these concerns are fewer in number than in previous years. In addition, the sub-committee noted that these concerns do not appear to have affected student numbers as much as might have been expected, although the number of those taking the programmes has decreased slightly.

If any programme lead wishes to discuss their individual CASE response then they should initially contact the CASE co-ordinator who will then refer them onto the appropriate person.

### Student Numbers:

CASE has recently carried out some work in reviewing the number of Students taking CASE accredited courses since the 1999/2000 monitoring process. A graph showing the trends in changing numbers can be found below. It is hoped that this graph can be added to in future years to help to build up a more complete and ongoing picture of movements in the numbers of those undertaking training.



## CASE Website

This is currently hosted on the BMUS website and we encourage you to visit it at [www.bmus.org/case](http://www.bmus.org/case). It has a **directory of all CASE-accredited programmes** and their contacts. (If you are a prospective student, please note that CASE cannot assist you in finding a clinical placement. You must discuss that with the Higher Education Institute.) Note that paper copies of the Directory are now only supplied to course leaders and the parent bodies of CASE.

If you are a Programme Leader, please note that any amendments to information on the CASE website can be made by contacting the CASE Co-ordinator.

## Report on CASE Open Forum “Yes, Ultrasound Physics can be fun!” University of Leeds, 24<sup>th</sup> May 2007

The forty or so attendees consisted of course leaders and lecturers, students, and practice-mentors from the students' clinical departments. The main speakers of the day were Amanda Watson, chief ultrasound physicist for NHS Greater Glasgow, who teaches on the Glasgow Caledonian course, and Heather Venables, an experienced sonographer from the Leeds course, who is soon to start leading the Derby programme. Both emphasised that physics is best understood from practice on the machine. In her first talk, Amanda told how she works with a sonographer to encourage students to link their practice to the physics of the machine. While the ultrasonographer talks about the clinical utility (or otherwise) of the image, Amanda draws their attention to the annotation around it, and what it tells them about the underlying physics. They are encouraged to experiment with the controls on their own machines, and find out technical explanations for the results. She encourages them to be “control freaks”, but always with an emphasis on the clinical benefits. Encouraging inquisitiveness cropped up throughout the day – it sounds obvious, but perhaps we need to be reminded how important it is. Amanda explained how asking questions can help understanding: why is it called depth-gain *compensation*; why dynamic-range *compression*? The artefacts familiar to users can also help their understanding of the physics. She recommends certain websites for looking things up, and textbooks – even the old ones tend to explain the basic physics well.

Heather talked about overcoming Doppler anxieties. The need to understand the technology becomes obvious when a technically-difficult patient comes along. Like Amanda, Heather emphasised that hands-on training can dispel the fear, and that it would be better if Doppler practice could be given early in the training. Students need to understand more about the haemodynamics of their patients, and about the clinical purpose of their Doppler scans. That way they will use the appropriate presets, e.g. for slow or fast flow; and learn why harmonics and compounding are not always helpful for Doppler. With a scanner kindly lent for the day by Siemens, Heather demonstrated the importance of the “colour priority” control, which is so easily overlooked.

Heather has found students' problems stem from unfamiliarity with maths and physics; or from not enough opportunity to practise Doppler in their departments (in which case they

need to practise in other departments); or from their mentors being unable to help. Mentors in the audience were willing to admit that it is difficult to maintain familiarity with the technical issues, both in basic physics and in the new technology. Course leaders referred to the mentor training that many of them are providing, and would offer more if attendance was not often disappointing. Nevertheless, it appears that continuing education for mentors (or even all sonographers) needs to be encouraged, and effective ways found of delivering it. As well as basic physics revision, tutorials on new technologies are needed, with emphasis on their clinical effectiveness. Such things are not adequately available to busy sonographers, and the whole ultrasound community should find ways of changing that.

After lunch, it was appropriate to the previous discussion that Amanda Watson described the way she trains mentors in new technology on the Caledonian course. After some useful explanations and jargon-busting, she advised that each new method needs to be assessed according to its usefulness for the clinical task. Heather Venables explained that each new technology claims to improve a particular aspect of image resolution, and this should tell us what clinical tasks it will help.

Anne-Marie Dixon, course leader of the Medical Imaging MSc at the University of Bradford, finished the day by demonstrating a practical approach to ultrasound safety. Her link to the previous talks was that operators can only assure a patient that they are scanning safely if they are also scanning competently. Anne-Marie pointed out the many links between a sonographer's understanding of technology, and safety. She also recommended that sonographers' inquisitiveness should extend to requiring evidence that the scans they are asked to do are clinically effective; and that, whilst there are still no proven bioeffects associated with current routine practice, we must continue to apply vigilance and the ALARA principle as clinical use, applications, techniques and power levels increase, and emergent therapeutic applications are utilizing bioeffects that occur at intensity levels below currently recommended diagnostic safety thresholds.

To sum up, the speakers showed by their example how lecturers can encourage students, even with physics; and how hands-on training can overcome some barriers. The other great encouragement should be towards enquiry, for example about safety issues, new technology, and the clinical basis of scanning. Mentors (and all other operators) need continuing education to keep abreast of the technology they are using. The HEIs are already providing some, but the whole ultrasound community would do well to find more and continuous ways of delivering it. The CASE Council is pleased to encourage best practice through debate; and pleased that Open Forums like this can throw up important ideas. The challenge (for the whole community) is to follow them up.

Our thanks go to Rosemary Lee for suggesting the day's theme; to Leeds University for the pleasant facilities; to Siemens for lending the scanner; to the student model; to the speakers for their generous inspiration; to the attendees for a lively discussion; and finally to Alice Hepworth, CASE Coordinator, for her excellent organisation of the day.

## Feedback from CASE Open Forum

All delegates at the Open Forum were asked for their own opinions on the day, on a variety of topics ranging from the venue, lecture content and programme to suggestions for future forum subjects for CASE to consider.

**Comments on the Lecture & Programme:**

*'There was appropriate & relevant content which was applicable for clinical practice'*

*'The talks were good and informative, not too complicated'*

*'All lectures well delivered and correctly pitched including some good updates and some new tricks to try'*

*'It was a very good day, useful & thought provoking bringing up things to discuss with students'*

*'There was a nice, friendly, informal format which worked well'*

*'There could have been more practical tips for teaching in clinical practice and more clinical examples would have helped'*

*'Some info on what should be in a contemporary CASE accredited course could have been useful'*

*'The day could have benefited more from some more 'how to' examples and practical tips'*

*'All the lectures were very informative & helpful'*

**Comments on the Venue**

*'Good venue & excellent catering'*

In terms of the delegates on the day, there was a good mix of University Lecturers, Clinical Specialist Radiographers and Sonographers, Sonographers and Clinical Supervisors. This gave a good mixed outlook from those who were involved in University Education, those undertaking practical clinical training of students and also some who combined the two roles.

**SUGGESTIONS FOR FUTURE OPEN FORUM SUBJECTS**

- Reporting Ultrasound examinations
- Assessment of Clinical Competence
- Starting an intervention service – risk assessments, clinical protocols, trust approval etc
- How to examine theory
- How should departments structure for clinical experience in view of e-learning?
- Burnout in Ultrasound – who is to blame?
- Training of Clinical Mentors
- Update on new clinical developments/techniques, aside from equipment
- Purchasing of Ultrasound equipment – the process/tips/good practice

If you have any comments on these, or suggestions of your own, please send them to the CASE Coordinator, Alice Hepworth, ([CASE@bmus.org](mailto:CASE@bmus.org))

## CASE Council Meetings 2007

The next CASE Council meeting in 2007 will be held at 36 Portland Place, London on 17<sup>th</sup> July 2007

***All programme leads are advised that the CASE Co-ordinator should be notified in writing no later than 3 weeks prior to the Council meeting with .any business to be addressed at this meeting. A reminder will be sent.***