

Notes from the Institute of Anatomical Sciences (IAS) meeting, May 2008

There's nothing like the approach of spring to lift the heart and lighten the spirits following a gloomy winter, and it's even better when, if like me you love your anatomy, you get to attend the Institute of Anatomical Sciences Spring Scientific Meeting. The aim of this rather specialised Institute is "...to allow scientists round the world and from a broad variety of fields to exchange information and resources to facilitate their work and to expand their skills." They hold regular meetings where speakers present information and ideas relevant to anatomy and the teaching of anatomy, on topics as varied as how best to preserve bone tissue, to legal issues affecting the teaching of anatomy in dissection rooms. Members are passionate about their subject and about the dissemination of information so I have always tried to support this organisation by being a member. Over the years I have enjoyed reading the newsletter and receiving the journal and getting a feel for the opportunities and challenges faced by IAS members. But until now I had never been able to attend one of the meetings so was really looking forward to meeting some of the members even though I was a little nervous. A former student, about to start her training as a doctor, was also planning to go so we met up and together made our way to the venue.

The welcome address was given by Professor Tony Firth, Head of Human Anatomy Unit, who talked about the challenges he faced when putting together the anatomy content of the Graduate Entry Medical Curriculum. One of the issues raised was the problem of teaching anatomy without cadavers, when the use of cadavers in training has been a traditional right-of-passage for medical students. There was agreement that training needed to change in order to adapt to new technology and the fact that today, doctors require the ability to read and understand a wide range of images, not just old fashioned x-rays. It will be interesting to contrast this talk with the forthcoming lecture on Anatomical Dissection: Is It Still Relevant To Surgical Training being held at the Royal College of Surgeons in June.

The next speaker was Dr Kirstin Goldring who explained the process and purpose of 'Brain Banking' at Imperial College London. Brains are donated to Imperial from people with multiple sclerosis and Parkinson's Disease in order to provide human tissue for research into these conditions. Brains are also donated from people with neither conditions and used as controls. The collecting and preservation process was described in detail: Tissue is collected within 24 hours, frozen, cut into blocks, sliced and stained ready to be used by researchers from all over the world. There are 1142 registered donors + 431 control donors. Approximately 4 donors register each month and the Bank hold open days once a year to enable medical professionals the change to observe and understand the process.

Vin Chauhan of Imperial College's Pathology Museum gave a lecture on Gross Anatomical Pathology - A historical perspective. He explained what we in the audience knew, that pathology museums hold great value as a teaching resource yet students are rarely told they should visit them. I remembered using the pathology museum at King's when I was doing my physiotherapy training, walking slowly down the winding steps like I was in some sort of castle stairwell, and feeling both awe and intrigue at the numerous pathologies on display. There was a discussion about the 10,000 pots that the IAS are trying to reclaim and either repair or dispose of, and it was suggested that what we all desperately needed was a national pathology museum.

Later, Dr Marie Louise Jørvkov, Forensic Science lecturer from Bournemouth University presented a lecture 'What bone can tell: the role of the forensic anthropologist'. She explained that forensic anthropologists work to identify mass graves as well as individuals and gave the example of a case where she was asked to identify the remains on a fishing trawler that had caught fire. Questions forensic anthropologists ask include: Is it human? How many bodies do we have? When did it happen? I found the section of the talk on how to differentiate between male and female remains based on features of the skull fascinating and learnt a lot of new things.

'Blogger brother - a real pain in the neck' was an amusing talk given by Wendy Birch of UCL. Wendy explained the nightmare she faced when it was discovered that, using their mobile phone, someone who had come into the Dissection Rooms as part of their osteopathy course and taken photographs of some cadavers and placed the images on their Facebook blog. The audience listened in unified horror. Not only is it illegal to take photographs inside the DR, it is obviously highly disrespectful to display them publicly.



Use of mobile phones is banned in the DR of all teaching establishments.

Dr C Davies of St George's Medical School presented an update on the Human Tissue Authority, the independent statutory regulator sponsored by the Department Of Health. Obviously of considerable interest to members, many of whom work in the dissection labs of their universities.

The last lecture of the day was from Dr Paul Strutton of Imperial College Biosurgery and Surgery Technology Dept. He described and demonstrated the use of magnetic stimulation of the human brain to investigate movement. A volunteer had their brain stimulated using coils, much to the interest and amusement of the audience. Dr Strutton explained that the technology could be used to reorganise neural pathways that have been disrupted as well as to test the integrity of these pathways and discover how excitable different areas of the brain are.

During the day I met my old anatomy teacher, Dr Hunter from King's College London, and was invited to see the dissection rooms at Southampton University. Altogether I came away from the meeting a very happy spring bunny!

Still on the theme of anatomy, Last week I attended an evening lecture organised by the Hunterian Museum on The Artist and The Anatomist. Professor Ellis talked us through early anatomical illustrations and commented on the fact that one of the reasons early anatomy books sold so well was of course down to the beauty of the illustrations they included.

Having studied anatomy for many years for many different therapy related courses I thought perhaps there would have been reference to modern anatomical artists. I guess one has to ask that age old question "what is art?" in order to establish a baseline from which to present a talk like this. There could have been a reference to the computer generated 'art' of companies such as Primal Pictures. No where near as stunning as the beautiful Leonardo Da Vinci drawings, but worth mentioning if only for comparison.

I was also wondering about the modern training of anatomical artists and the ways in which their work is utilised. Some of you reading this may have a copy of Strength Training Anatomy by Frédéric Delavier, (a particular favourite of sports injuries students!) containing illustrations showing which muscles are being used during particular strength training movements. One doesn't have to like the illustrations to acknowledge that they are useful.

One of my favourite books is Core Anatomy for Students: The Limbs and Vertebral Column, by Dean and Pegington as it contains the most wonderfully clear line drawings by a lady called Joanna Cameron. In fact, the beauty of the book for me was the clarity of Ms Cameron's drawings.

Also, the wonderful illustrations in the originally-German textbook, Colour Atlas and Textbook of Human Anatomy : Locomotor System by Werner Platzer is invaluable. They certainly helped me as a poor physiotherapy student!

If you are interested in anatomical illustration you may wish to check out the website of Dr Donald Sammut. Dr Sammut is both a hand surgeon and an illustrator and his website shows examples of some of his lovely paintings (www.donaldsammut.com). I guess Donald's work is so good because he has seen it all first hand, if you'll pardon the pun!

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