**Plastination of Soft-Fixed Specimens in Anatomical Education: Experience with Thiel (Dundee) and Genelyn (Dublin) Preparations**

With the increasing demand for anatomical institutes to move away from traditional formalin embalming, the use of soft-fix embalming methods is increasing. The ways in which these soft-fix embalming fluids are administered are similar to those of traditional formalin, however very little is known about how anatomical techniques which follow the embalming process are affected by the use of soft-fix embalming. Throughout the literature, plastination is carried out following formalin fixation or utilises fresh specimens. Thus there is a need to explore the changes soft fix embalming fluid has on the plastination process as the chemical composition of soft fix embalming fluids differ from traditional formalin fixation.

Plastinated specimens are an invaluable resource to anatomy departments as they allow the longer term preservation of valuable teaching specimens. However within the literature there are no accounts on how to adjust techniques for specimens which have been soft-fixed.

By the collaboration of the University of Dundee (UOD) and the University College Dublin (UCD), we can gain insight to how the methods of plastination must be altered to optimise Thiel (UOD) and Genelyn (UCD) preservation methods. As well as investigating the necessary changes needed to adapt the plastination technique to soft-fixed cadaveric specimens, the viability of retaining flexibility in plastinated specimens will be explored. These improvements will be most useful if the durability and robustness of the specimen are maintained.

**27th August 2014 – 29th August 2014**

**Ms Amanda Hunters visit to UCD**

I was present at UCD for three days in which practical expertise, skills and experiences were exchanged. These proved invaluable as UOD is currently in the final stages of setting up an S10 plastination facility. Dr Gaperts experience in this field, his knowledge and guidance were invaluable as he shared with me unpublished techniques and adjustments to certain stages in the traditional S10 process to create superior aesthetically pleasing specimens. Dr Gapert showed me the plastination set up at UCD and was able to describe and demonstrate specimens at various stages of the plastination process.

I was introduced to all the key members of staff including technicians and the head of department Professor James Jones. Professor Jones introduced me to his current research project utilising CT scans of the human eye, which were then used as input to a 3D printer that produced an exact anatomical replica of the human eye, enlarged 3 times the original size to allow visualisation of this intricate area to aid in teaching students. Professor Jones was also looking at alternative polymers to produce dissectible modules for students to work on. With my current contact with Dr Daniel Melling, a polymer chemist based in Dundee, it was proposed that Professor Jones, Dr Melling and I could at some point work together in order to facilitate the production of a polymer with significant advantages when applied in the field of anatomy.

During my visit I was also exposed to cadavers which had been Genelyn embalmed. This was invaluable as observing the differences between Thiel and Genelyn embalmed cadavers is crucial to understanding the differences that may be observed during the plastination process. I was unable to observe a Genelyn embalming owing to lack of any human tissue donation for research during my short visit to UCD.

**Dr Gaperts Visit to UOD**

Unfortunately, owing to health reasons, Dr Gaperts visit to UOD was postponed.