

**Syllabus proposed by Paul Griffiths PhD, FRCR, Professor of  
Radiology, University of Sheffield, UK Mar 25 2011 to replace the  
original**

**Meeting:** ISMRM 2011 Montreal

**Session:** Morning Sunrise Session on Pediatric Imaging (methodological issues)

**Title:** Rationale behind post-mortem MR of the fetal CNS and methodology

There has been considerable interest in post-mortem MR imaging over the last few years. The rationale and philosophy behind performing these examinations on a fetus are fundamentally different from applications of the technique in children and adults. Most post-mortem information, historically, has been obtained from physical examination of the body and autopsy. There has, however, been a considerable reduction in the take up rate of invasive post-mortem procedures in Britain, primarily because of well publicised concerns about tissue retention without parental consent. This led to evaluation of post-mortem MR imaging as either an adjunct or possible alternative to invasive procedures.

In this talk I will review the reasons why accurate and robust post-mortem information about fetal neuropathology is important. I will show the benefits that accrue if post-mortem MR imaging of the fetus is performed both for clinical and research reasons. I will show the major differences between the fetal brain and that of the older child and describe the optimal MR methods of investigation arising from those differences.