

Human placental development: Monday 2nd July 09.00

Using our unique collection of placenta-in-situ specimens, this interactive lecture and the accompanying practical session will provide a comprehensive overview of normal human placental development, from implantation through the histiotrophic phase during the first trimester to the mature haemochorial organ. The origin of the various sub-populations of trophoblast and their respective roles at the maternal-fetal interface will be considered, along with development of the placental villi and their classification into different sub-types. Particular attention will be paid to the physiological conversion of the uterine spiral arteries, and onset of the maternal circulation. The haemodynamic consequences of conversion and the pattern of maternal blood flow through the intervillous space will be discussed. Participants will have ample opportunity to examine and explore the placenta-in-situ histological sections, and to test their own interpretation of the 3-dimensional topography of the placental villous tree from the 2-dimensional sections.

Prof. Graham Burton