

# Little embryos do make big decisions



Symposium to celebrate the career of Professor Tom Fleming FRCOG  
on the occasion of his retirement



Friday 7 July 2017, St Mary's Stadium, Southampton, UK



Tom Fleming is Professor of Developmental Biology within Biological Sciences at the University of Southampton, UK. Tom graduated in Zoology from University of Wales (1972), obtained his PhD from Polytechnic of the South Bank (University of London; 1979) for research in invertebrate reproduction and pollution, was a postdoc at University of Keele until 1981 and then Senior Research Associate at Cambridge University where he moved into the field of mouse embryology. He relocated to Southampton in 1988 as Lecturer and became Professor in 1998.

Tom's work at Cambridge with Prof Martin Johnson and continuing in early years at Southampton concerned the cell biological mechanisms of mouse embryo development including cell polarity, epithelial differentiation and blastocyst morphogenesis. His group more recently has focused on the influence of environment around the time of conception on subsequent development and adult health. Tom's pioneering studies have demonstrated poor maternal diet (*in vivo*), maternal sickness (*in vivo*) or IVF-related culture conditions (*in vitro*) before the embryo

implants into the uterus provoke changes in the developmental programme affecting fetal growth and postnatal disease risk, especially cardiovascular, metabolic and neurological dysfunction. His research, influenced by Prof David Barker's epidemiological studies at Southampton on disease origin, comprise a range of molecular, epigenetic, cellular and physiological technologies to help understand mechanistically the legacy of early embryonic environment on health over the lifetime.

Tom has been Editor-in-Chief of *Reproduction* over 2008-end 2012, is an editorial board member for several reproductive/developmental biology journals, is a Council member and Treasurer of the Society of Reproduction and Fertility (SRF), and sits on various grant committees and advisory boards. He has published over 150 original research publications. At Southampton, he was former Head of Cell Sciences department and Associate Dean for Research. He was made an Honorary Fellow *ad eundem* of the Royal College of Obstetricians and Gynaecologists in 2013 and was awarded the Marshall Medal from SRF in 2013 for outstanding contributions to the study of fertility and reproduction. More importantly, he is an avid Saints supporter.