It is a great pleasure mixed with some sadness to write this editorial. The entire November issue is around the subject of congenital infection, with the focus on the most common, serious cause of congenital malformation in Australia – congenital cytomegalovirus. Infection with cytomegalovirus (CMV) causes serious disease in children globally, resulting in congenital infections present in ~2000 Australian newborns every year, of whom most are asymptomatic, with ~450 per annum (pa) affected by hearing loss, mental disability and other illnesses. Some of the key clinical features of congenital CMV are outlined here in articles by Wendy van Zuylen, Klaus Hamprecht and Robert George, and the pathogenetic features in Lenore Pereira’s paper. Treatment and vaccination are moving ahead (as discussed in papers from some key Italian groups), although not fast enough for many of us – as parents of children with CMV discuss in two papers here. We also include papers on other causes of congenital infection that are much less common than congenital CMV in Australia. Although these are not related to congenital CMV clinically, with very different medical and epidemiological settings, it is important to put congenital CMV in context, as well as to draw attention to other important causes of congenital infection.

We all love children, and we all hate to see them distressed or unwell. When their illness arises during pregnancy, from an infection, and is avoidable, we are all troubled, and then can become disillusioned. Why if this is avoidable was this allowed to happen? Why did it happen to this (my) child? Why is there no treatment? Why is there little policy in this area? And why are we informed about seafood (potential mercury and infection risks), soft cheese (potential listeria risks), undercooked meat and pregnant cats or kittens (toxoplasmosis risks), sexually transmitted infections (HIV, syphilis) and not about CMV? It is important to put these public health messages in context, when the rates of these other infections are much lower. In Australia annually, for HIV there are ~1.3 new paediatric congenital infections pa, listeria there are ~15 new paediatric infections pa, syphilis there are ~7 new congenital infections pa, and for congenital toxoplasmosis the rates are unknown, but on clinical likelihood less than 20 per year. Direct quotes from families affected by congenital CMV are the best way of telling the story – ‘I really wish that I wasn’t writing to you and I wish that I wasn’t aware about a virus called CMV. However this isn’t the case’, ‘My doctor told me about CMV after our baby was born’, ‘When I asked about treatment and was told there was none available, and the only one that might work was experimental, I wondered why’. So what is our responsibility as health care workers, researchers, parents, aunts, uncles, grandparents and policymakers? The authors here from scientific, medical, clinical obstetric, paediatric, infectious diseases, and family backgrounds address some of these issues. They outline not only the problems we see clinically, scientifically, and personally but also some things that can be done now to stop pregnant women from getting CMV and from their babies suffering from illnesses caused by congenital CMV infection. These include informing parents, obstetricians, midwives, allied health professionals and other clinicians about congenital CMV, increasing research into preventing CMV, producing vaccines, producing antivirals, and lobbying for better policy now in stopping CMV. Indeed there are things we can do now to prevent the tragedies of congenital CMV, again in the words of a parent whose child was stillborn as a result of congenital CMV – ‘I still don’t have all the answers as to what happened or why things were not known. This will not help E, but maybe it will help someone else’.

Finally, we have a tribute to Professor Geoffrey Shellam. Geoff was a friend and colleague to us, whose achievements were in many areas of virology and immunology, not only CMV. However, for those of us working in CMV infection, he represented a great strength, friend and mentor, particularly working with the murine model of CMV pathogenesis. Indeed ‘A muribus discimus hominum – From mice man learns’, and Geoff along with his outstanding group of researchers at UWA learnt a lot from mice, but also transmitted that knowledge to many of us, including me. He is greatly missed, but leaves an honourable legacy of respect, knowledge and love that will continue.

All of the authors here hope that through the articles in this publication our understanding of congenital CMV can be shared, our enthusiasm for solving this terrible medical problem can encourage engagement of clinicians and researchers, and ultimately we can help prevent congenital CMV from affecting our children in the future.

Biography
Professor William Rawlinson is a Medical Virologist and is Director of the Division of Serology and Virology (SAViD) and a NSW State Reference Laboratory in HIV, in the Department of Microbiology SEALS. He is a consultant position to the Department of Infectious Diseases, Prince of Wales and Sydney Children’s Hospital. He holds a conjoint academic position as Professor in the School of Medical Science and the School of Biotechnology and Biomolecular Sciences at The University of New South Wales, currently supervising PhD, Masters and Honours students. His major research interest is in human cytomegalovirus (CMV) infection of mothers and babies, particularly mechanisms of transplacental virus transmission. The research group that he heads studies congenital infections, enteroviruses, hepatitis viruses, respiratory viruses, novel antivirals and antiviral resistance.