

# 2016 DAVID TODD ORATION



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### **“The Rising Tide of Kidney Disease”**

Renal medicine is a relatively young specialty. Much of its early development was centred around technology: dialysis and transplantation as treatments for renal failure. In the early days, these treatments were limited in scope and application by technical hurdles, cost and unfamiliarity. Renal disease and the professionals who manage it became associated with complexity and opacity, the effect being that renal medicine seemed esoteric and high brow. Nephrologists and renal pathologists contributed to this by developing impenetrable terminology (for example the subdivisions of glomerulonephritis) which appeared designed to baffle the uninitiated. As the specialty has matured, it has been necessary to de-mystify its subject. This has coincided, without it being entirely clear to me what is cause and what is effect, with the realisation that kidney disease is in fact much more common than previously appreciated. Some recent estimates put the prevalence of kidney disease as high as one-sixth of the adult US population. Obesity and diabetes are major contributors, hypertension is often associated (and there is an ongoing debate about whether it is primary or secondary). There is no healthcare system in the world than could cope with the scale of renal replacement therapy that would be required if one sixth of the population needed it. Prevention is the only answer. The other poorly appreciated fact about kidney disease is that most people with it will not die of kidney failure, they will die of cardiovascular disease. The association between renal disease and enhanced susceptibility to cardiovascular disease is poorly understood. With this background, in my David Todd oration I will try to illustrate some recent advances in basic science understanding of renal disease and its progression, point to some preventive strategies which might work and highlight the risks of neglecting this rising tide of kidney disease.