



## Professor Sharon Ricardo

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**WEB** [med.monash.edu/anatomy/research/kidney-regeneration-stem-cell.html](http://med.monash.edu/anatomy/research/kidney-regeneration-stem-cell.html)

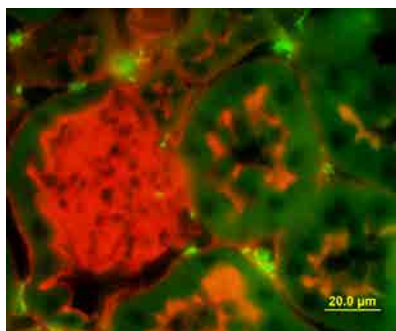
Kidney disease is a widespread and debilitating health issue facing millions of people worldwide. The progression to end-stage renal disease is now a critical health issue where the incidence is rising rapidly at a rate of around 6-8% per year. Our research focuses on the development of stem cell-based therapies and/or growth factors that may repair damaged kidney tissues and reverse the development of scarring, thereby reducing the need for kidney dialysis or organ transplantation.

### Research Projects

1. Pluripotent stem cells from patients with kidney disease
2. Can mesenchymal stem cells protect against kidney fibrosis?



iPS cell colony in culture



Mesenchymal stem cells

### Selected significant publications:

1. Brooke M Huuskens, Andrea F Wise, Alison J Cox, Ee X. Lim, Natalie L Payne, Darren J Kelly, Chrisan S Samuel, **Ricardo SD**. 2015. Combination therapy of mesenchymal stem cells and serelaxin effectively attenuates renal fibrosis in obstructive nephropathy. *FASEB J* 29(2):540-53.
2. Wise AF, Williams TM, Kiewiet MBG, Siatskas C, Payne NL, Samuel CS and **Ricardo SD**. 2014. Human mesenchymal stem cells alter macrophage phenotype and promote regeneration via homing to the kidney following ischemia/reperfusion injury. *Am J Physiol* 306(10):F1222-35.
3. Song B, Niclis J, Alikhan M, Sakkal S, Sylvain A, Kerr PG, Laslett AL, Bernard CA and **Ricardo SD**. 2011. Generation of induced pluripotent stem cells from human mesangial cells. *Journal of the American Society of Nephrology* 22(7):1213-1220 Featured in editorial highlight, cover image.
4. **Ricardo SD**, H van Goor, Eddy AA. 2008. Macrophage diversity in renal injury and repair. *Journal of Clinical Investigation* 118(11); 3522-3530.
5. Cochrane AL, Kett MM, Samuel CS, Campanale NV, Anderson WP, Hume DA, Little MH, Bertram JF, and **Ricardo SD**. 2005. Renal structural and functional repair in a mouse model of reversal of ureteral obstruction. *Journal of the American Society of Nephrology (JASN)* 16(12):3623-30. Featured article in editorial.