



Project Title: Stem Cell treatments for type 1 diabetes		Code: SOMS5
Host School / Institute: School of Medical Sciences/ Charles Perkins Centre		Address: Charles Perkins Centre
Certificates & Clearances required: No		
Primary Supervisor: Prof Peter Thorn		
Phone: 0416 862 729	Email: p.thorn@sydney.edu.au	
Co-Supervisor/team: The lab has four post-doctoral researchers, one HDR student and numerous undergraduate students.		
Project Type: Laboratory based		
Project Category: Endocrinology/Metabolism		
Skills / Attributes of a successful student: Some lab experience would be an advantage but is not necessary		
Project Keywords: diabetes; insulin; stem cell		
Project Description: The use of stem cells to produce insulin secreting cells is now thought to be on the horizon as a treatment for type 1 diabetes. However, to achieve this we need to make cells that mimic the responses of native beta cells. To date, the cells produced respond poorly to glucose and would have little therapeutic value. In our lab we are working on identifying the environmental cue that normal beta cell respond to in the islet. We are then testing to see if these cues can influence the differentiation of stem cells (both embryonic and induced) and to make them respond better to glucose.		