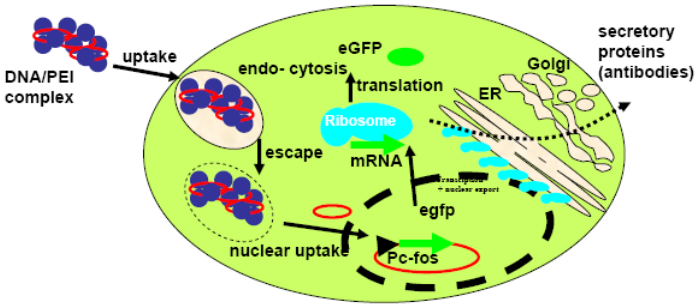
Process development for transient production of recombinant proteins by animal cells culture

Supervisor: Dr. Jingxiu Bi, Dr. Hu Zhang
Nature of work: Experimentally investigate transient gene expression in animal cell culture system
Area: cell culture engineering
Funding: *Via* the various University scholarship schemes (see separate information for these).

Brief description: This investigation will focus on the optimization and evaluation of a high-throughput transient expression system by using a novel stronger c-fos promoter in serum free suspension culture. Two DNA delivery methods of calcium phosphate co-precipitation (CPC) and polyethylenimine (PEI) will be compared and optimized to achieve high transfection efficiency and expression. Furthermore the kinetic of the protein expression by green fluorescent protein (GFP) will be applied to optimize the process of transient expression. This will involve interaction with an international recognised expertise in the cell culture engineering (Professor Dr. An-Ping Zeng Technical University of Hamburg Harburg, Germany)



There are many more in the areas of recombinant protein expression by animal cell cutrue, tissue engineering and bioprocess optimization. Feel free to contact me (jingxiu.bi@adelaide.edu.au; +61-8-8303-4118) or drop in to my office (N212) if you want to have further discussion or other possible PhD projects.