

# BIJU PAREKKADAN

**Status: Second Year Graduate Student – Medical Engineering & Medical Physics**

**Focus: Regenerative Medicine**

**Graduate Advisors: Drs. Mehmet Toner and Martin L. Yarmush**

**Graduate:  
Harvard-MIT Division of Health Sciences and Technology**

**Undergraduate:  
Rutgers University, Department of Biomedical Engineering**

My research is in the area of stem cell bioengineering. The focus of this project is to determine the effect of cell-cell interactions between a lineage-specified stem cell and an undifferentiated stem cell. To this end, I plan to develop single cell cocultures using a BioMEMS approach to determine the effect of heterotypic cell interactions on stem cell phenotype.



## **Recent Abstracts & Presentations**

**Parekkadan B**, Natasha T, Maguire TJ, Schloss RS, Yarmush ML. Microencapsulation of Murine Embryonic Stem Cells for the Generation of Functional Hepatocytes. Presented at the 3<sup>rd</sup> Annual Biomedical Engineering Senior Design Conference and 2003 ASME Summer Bioengineering Conference Key Biscayne, FL: June 2003.

**Parekkadan B**, Harvey J, Knutson J. Fluorescence Study of Protein Engineered HIV-1 Integrase. Presented at the International Symposium of Scientific Initiative, University of São Paulo, São Paulo, Brazil: Nov. 2002.

**Parekkadan B**, Harvey J, Knutson J. Fluorescence Study of Protein Engineered HIV-1 Integrase. Presented at the NIH BESIP Conference and the National Institutes of Health Poster Day, Bethesda, MD: Aug. 2002.

**Parekkadan B** and Brennan R. Investigation of Novel Heating/Cooling and Homogenization Systems in Fed-Batch Reactors. Presented at Johnson & Johnson Consumer Products World-Wide, Skillman, NJ: Aug, 2001.

**Parekkadan B** and Hart B. Diffusion Study of an Antibacterial Agent in Polymer Systems. Presented at Johnson & Johnson Consumer Products World-Wide, Skillman, NJ: Aug, 2000.

## **Awards**

National Science Foundation Graduate Research Fellowship, 2003-2006

James J. Slade Scholar of Engineering (*summa cum laude*), Rutgers University - School of Engineering 2002-2003

National Institutes of Health/Whitaker Foundation: Supplemental Intramural Research Training Award (IRTA) Fellowship, 2002