

MSTP STUDENT DESCRIPTION

NAME: **Arsalan Q. Shabbir**

e-Mail address: **ashabbir@buffalo.edu**

Undergraduate College/University attended: **New York University**

Major: **Biochemistry**

Years in MSTP (1-8): **6th year**

DEPARTMENT: **Biochemistry**

THESIS ADVISOR: **Dr. Techung Lee**

RESEARCH DESCRIPTION:

PhD Thesis title: **Mesenchymal Stem Cell Therapeutics**

Date of Completion (or expected) of PhD: **June 2009**

PUBLICATIONS / ABSTRACTS PRESENTED:

Publications

Zisa D, **Shabbir A**, Suzuki G, Lee T. Skeletal Muscle Activation by VEGF Mediates Heart Repair. (Manuscript in Preparation)

Shabbir A, Zisa D, Suzuki G, Lee T. 2009. Heart Failure Therapy Mediated by the Trophic Activities of Bone Marrow Mesenchymal Stem Cells: A Non-invasive Therapeutic Regimen. *American Journal of Physiology – Heart and Circulatory Physiology*, (In Press)

Shabbir A & Zisa D, Leiker M, Johnston C, Lin H, Lee T. 2009. Muscular Dystrophy Therapy by Non-Autologous Mesenchymal Stem Cells: Muscle Regeneration without Immunosuppression and Inflammation. *Transplantation*, (In Press)

Missihoun C, Zisa D, **Shabbir A**, Lin H, Lee T. 2009. Myocardial oxidative stress, osteogenic phenotype, and energy metabolism are differentially involved in the initiation and early progression of delta-sarcoglycan-null cardiomyopathy. *Molecular and Cellular Biochemistry*, 321(1-2):45-52.

Lin H, **Shabbir A**, Molnar M, Yang J, Marion S, Canty JM Jr, Lee T. 2008. Adenoviral expression of vascular endothelial growth factor splice variants differentially regulate bone marrow-derived mesenchymal stem cells. *Journal of Cellular Physiology*, 216(2):458-68.

Lin H., **Shabbir A**, Molnar M, and Lee TC. 2007. Stem cell regulatory function mediated by expression of a novel mouse Oct4 pseudogene. *Biochemical & Biophysical Research Communications*, 355(1):111-6.

Shabbir A, DiStasio S, Zhao J, Cardozo CP, Wolff M.S., Caplan A.J. 2005. Differential effects of the organochlorine pesticide DDT and its metabolite p,p'-DDE on p-glycoprotein activity and expression. *Toxicology & Applied Pharmacology*, 203(2):91-8.

Lee P, **Shabbir A**, Cardozo C, Caplan AJ. 2004. Sti1 and Cdc37 can stabilize Hsp90 in chaperone complexes with a protein kinase. *Molecular Biology of the Cell*, 15(4):1785-92.

Abstracts

Zisa D, **Shabbir A**, Suzuki G, Johnston C, Aleksic I, Leiker M, Lee T. "VEGF Induced Skeletal Muscle and Heart Regeneration in the Delta-Sarcoglycan Null Hamster." Seventh Annual Biochemistry Research Day, University at Buffalo. Buffalo, NY. May 4, 2009.

Shabbir A, Suzuki G, Zisa D, Missihoun C, Leiker M, Canty J, Lee TC. Non-Invasive Mesenchymal Stem Cell Therapeutics in a Rodent Model of Heart Failure. Sixth Annual Biochemistry Research Day, University at Buffalo. Buffalo, NY. May 2, 2008.

Zisa D, **Shabbir A**, Leiker M, Missihoun C, Lee TC. Phenotypic and Functional Analyses of Delta-Sarcoglycan Null Mesenchymal Stem Cells. Sixth Annual Biochemistry Research Day, University at Buffalo. Buffalo, NY. May 2, 2008.

Suzuki G, Iyer V, **Shabbir A**, Zisa D, Palka B, Cimato T, Lee TC, Canty J. "Pravastatin Followed by Intracoronary Fibroblast Growth Factor (FGF-5) Synergistically Amplifies Endogenous Cardiac Repair in Swine with Hibernating Myocardium." American College of Cardiology Annual Meeting. March 29-31 2009.

Shabbir A., Molnar M., Missihoun C., Lee T.C. Intramuscular administration of xenogeneic mesenchymal stem cells improves physiological function in a hamster model of dilated cardiomyopathy. Fifth Annual Biochemistry Research Day, University at Buffalo. Buffalo, NY. May 7, 2007.

Shabbir A., DiStasio S., Zhao J., Cardozo C.P., Caplan A.J. Role of DDT and DDE on MDR1 Induction and Stability. Superfund Basic Research Program Annual Meeting, Dartmouth College. Hanover, NH. November 9-12, 2003.

Paul Lee, **Arsalan Shabbir**, Christopher Cardozo, Qiang Zhao, Frank Boschelli, Kim Arndt and Avrom J. Caplan. Molecular Chaperones & the Heat Shock Response 2004 Meeting, Cold Spring Harbor Laboratory. Cold Spring Harbor, NY. May 5-9, 2004.

AWARDS / HONORS:

Medical School Awards:

The Elizabeth Olmstead Ross Award for Outstanding Graduate Student Oral Presentation

The Edward L. Curvish M.D. Award, 2005

The McGraw Hill Companies Medical Publishing Lange Student Award, 2005

Commendation from the Dean, 2005 & 2006

The Ernest Witebsky Award, 2006

Gilbert D. Moore Fellowship, 2004-2006

