
BIOGRAPHICAL SKETCH

NAME Ranjeet M. Dongaonkar	POSITION TITLE Assistant Research Scientist
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EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Dr. Babasaheb Ambedkar Marathwada University	B.E.	1998	Production Engineering
Texas A&M University	M.S.	2003	Mechanical Engineering
Texas A&M University	Ph.D.	2008	Biomedical Sciences
Texas A&M University	Postdoc	2008	Cardiovascular Physiology

A. Positions and Honors.**Positions:**

Research Assistant , Mechanical Engineering, Texas A&M University	2000-2002
Teaching Assistant , Mechanical Engineering, Texas A&M University	2003
Graduate Mentor , Michael E. DeBakey Institute, Texas A&M University	2004-2006
Scholar , Michael E. DeBakey Institute, Texas A&M University	2004-2008
Research Assistant , Physiology and Pharmacology, Texas A&M University	2004-2008
Assistant Research Scientist , Physiology and Pharmacology, Texas A&M University	2008-present

Honors:

Graduate Merit Scholarship , Mechanical Engineering, Texas A&M University	2001-2002
Graduate Student Travel Grant , CVMGSA, Texas A&M University	2005-2007
Graduate Merit Scholarship , Physiology and Pharmacology, Texas A&M University	2005-2008
Academic Excellence Award , Texas A&M University	2007
International Education Fee Scholarship , Texas A&M University	2007
Academic Excellence Scholarship , Texas A&M University	2007-2008

B. Selected peer-reviewed publications**Journal Articles:**

1. Venugopal AM, Stewart RH, Laine GA, Dongaonkar RM, Quick CM. Lymphangion coordination minimally affects flow in lymphatic vessels. *Am J Physiol Regul Integr Comp Physiol*, 293: H1183- H1189, 2007.
2. Dongaonkar RM, Quick CM, Stewart RH, Drake RE, Cox CS, Laine GA. The Edemagenic Gain and interstitial fluid volume regulation. *Am J Physiol Regul Integr Comp Physiol*, 294: R651- R659, 2008.
3. Quick CM, Venugopal AM, Dongaonkar RM, Laine GA, Stewart RH. First-order approximation for the lymphangion pressure-flow relationship. *Am J Physiol Heart Circ Physiol*, 294: H2144- H2149, 2008.
4. Dongaonkar RM, Stewart RH, Laine GA, Davis MJ, Zawieja DC, Quick CM. Venomotion modulates lymphatic pumping in the bat wing. *Am J Physiol Heart Circ Physiol*, 296: H2015- H2021, 2009.
5. Dongaonkar RM, Stewart RH, Laine GA, Quick CM. Balance point characterization of interstitial fluid volume regulation. *Am J Physiol Regul Integr Comp Physiol*, 2009. (in press)

Conference proceedings and abstracts (Abstracts of my student mentees indicated by asterisk):

1. Dongaonkar R, Johnston J, Quick CM, Stewart RH. Novel noninvasive technique for in vivo measurement changes in tissue volume. Second Annual TAMUS Pathways Research Symposium, Corpus Christi, TX, October 15-16, 2004. *TAMUS 2*: 27-28, 2004.
2. Dongaonkar RM, Bogenschutz R, Stewart RH, Quick CM. A novel model to repeatedly characterize the effect of interstitial tethering on vascular function. 22nd Annual Houston Conference on Biomedical Engineering Research, Houston, TX, February 10-11, 2005. *HSEMB 22*: 128, 2005.
3. *Pepper PD, Dongaonkar RM, Ali JT, Quick CM. Evidence for coordination between intrinsic and extrinsic pumping of lymph. 22nd Annual Houston Conference on Biomedical Engineering Research, Houston, TX, February 10-11, 2005. *HSEMB 22*: 204, 2005.
4. *Nguyen PH, Dongaonkar RM, Quick CM. Repeated characterization of stress-strain relationships in an intact living membrane. TAMU Student Research Week, College Station, TX, March 28, 2005. *TAMU SRW 133-34*, 2005.
5. *Williams CM, Dongaonkar RM, Nguyen PH, Quick CM. Interstitial tethering affects vascular function in vivo. TAMU Student Research Week, College Station, TX, March 28, 2005. *TAMU SRW 134*, 2005.
6. *Pepper P, Dongaonkar RM, Ali JT, Quick CM. Evidence for coordination between intrinsic and extrinsic pumping of lymph. TAMU Student Research Week, College Station, TX, March 28, 2005. *TAMU SRW 135-136*, 2005.
7. *Bogenschutz R, Dongaonkar RM, Quick CM. Nondestructive methods to set stress and strain in a membranous tissue: effect on interstitial tethering. TAMU Student Research Week, College Station, TX, March 28, 2005. *TAMU SRW 137*, 2005.
8. Widmer RJ, Dongaonkar RM, Meisner JK, Laurinec JE, Zawieja DC, Stewart RH, Quick CM. Venomotion propels lymph in the pallid bat wing. *Experimental Biology 2005*, San Diego, CA, April 2-6, 2005. *FASEB J 19*: A169, 2005.
9. Desai KV, Cunningham CE, Ranallo NL, Zebda MA, Fontenot NR, Meisner JK, Dongaonkar R, Quick CM. Bat wing as a model for chronic changes in microvascular network structure. *Experimental Biology 2005*, San Diego, CA, April 2-6, 2005. *FASEB J 19*: A729, 2005.
10. Dongaonkar R, Bogenschutz RA, Stewart RH, Quick CM. Characterization of the mechanical coupling of microvasculature and interstitium in vivo. *Experimental Biology 2005*, San Diego, CA, April 2-6, 2005. *FASEB J 19*: A729, 2005.
11. Gatson SN, Meisner JK, Young MF, Dongaonkar RM, Quick CM. The eBat project: a novel model for live-animal distance learning labs. *Experimental Biology 2005*, San Diego, CA, April 2-6, 2005. *FASEB J 19*: A1352, 2005.
12. *Nguyen PH, Dongaonkar RM, Quick CM. Repeated characterization of stress-strain relationships in an intact living membrane. Third Annual TAMUS Pathways Research Symposium, Kingsville, TX, November 4-5, 2005. *TAMUS 3*: 43, 2005.
13. Desai KV, Cunningham CE, Ranallo NL, Zebda MA, Fontenot NR, Meisner JK, Dongaonkar R, Quick CM. Bat wing as a model for chronic changes in microvascular network structure. Third Annual TAMUS Pathways Research Symposium, Kingsville, TX, November 4-5, 2005. *TAMUS 3*: 55, 2005.
14. Dongaonkar R, Bogenschutz R, Stewart RH, Quick CM. Characterization of the mechanical coupling of microvasculature and interstitium in vivo. Third Annual TAMUS Pathways Research Symposium, Kingsville, TX, November 4-5, 2005. *TAMUS 3*: 55, 2005.
15. *Bogenschutz R, Dongaonkar RM, Quick CM. Characterization of the venular strain field in vivo. Third Annual TAMUS Pathways Research Symposium, Kingsville, TX, November 4-5, 2005. *TAMUS 3*: 59-60, 2005.
16. *Pepper PD, Dongaonkar RM, Chauvin M, Quick CM. Evidence for coordination between venomotion and intrinsic pumping of lymph. Third Annual TAMUS Pathways Research Symposium, Kingsville, TX, November 4-5, 2005. *TAMUS 3*: 63, 2005.
17. Nordt M, Meisner J, Dongaonkar R, Quick CM, Gatson SN, Karadkar UP, Furuta R. eBat: a technology-enriched life sciences research community. *ASIST 43*: 1-17, 2006.
18. *Pepper PD, Dongaonkar RM, Nguyen PH, Quick CM. Lymphatic contractions are dependent on the contraction velocity of the vein. 23rd Annual Houston Conference in Biomedical Research, February 9-10. *HSEMB 23*: 36, 2006.
19. Desai KV, Cunningham CE, Ranallo NL, Zebda MA, Fontenot NR, Meisner JK, Dongaonkar R, Quick CM. Bat wing as a model for chronic changes in microvascular network structure. TAMU Student Research Week, College Station, TX, *TAMU SRW*, 2006.
20. Dongaonkar RM, Pepper PD, Bloemer MJ, Quick CM. Developing evidence for mechanical coupling between venomotion and intrinsic pumping of lymph *Experimental Biology 2006*, San Francisco, CA, April 1-5, 2006. *FASEB J 20*: Abstract #205.15, 2006.
21. *Semien CP, Goudeau CA, Rose J, Bogenschutz R, Dongaonkar R, Quick CM. Do Venules Pump Blood? *TAMU REU presentations*, August 3, 2006.

22. Dongaonkar RM, Nguyen PH, Quick CM. Interstitial tethering affects microvascular function in vivo. 2006 Annual Fall meeting of the Biomedical Engineering Society, Chicago, IL, October 11-14, 2006. *Proceedings*, Abstract #1455, 2006.
23. *Semien CP, Goudeau CA, Dongaonkar R, Bogenschutz R, Stewart RH, Quick CM. Venomotion: do venules pump blood? Prairie View A&M University Biology Symposium, November 3, 2006. *Proceedings*, p. 16 2006.
24. Dongaonkar RM, Quick CM, Stewart RH, Laine GA. Edemagenic gain: interstitial fluid balance as feedback system. 24th Annual Houston Conference in Biomedical Research, February 8-9, 2007. *HSEMB* 24: 129, 2007.
25. Dongaonkar RM, Quick CM, Stewart RH, Laine GA. Edemagenic gain and interstitial fluid regulation. Experimental Biology 2007, Washington, DC, April 28-May 2, 2007. *FASEB J* 21: 590.2, 2007.
26. Dongaonkar RM, Meisner JK, Quick CM, Stewart RH. Bat wing venules pump blood. Experimental Biology 2007, Washington, DC, April 28-May 2, 2007. *FASEB J* 21: 586.21, 2007.
27. *Nguyen PH, Dongaonkar RM, Quick CM. Novel experimental model to integrate study of biomechanics and microvascular physiology in vivo. Experimental Biology 2007, Washington, DC, April 28-May 2, 2007. *FASEB J* 21: 587.4, 2007.
28. *Pepper PD, Bloemer JM, Dongaonkar RM, Quick CM. Isoflurane produces edema in the bat wing via arteriolar dilation and lymphatic pump inhibition. Experimental Biology 2007, Washington, DC, April 28-May 2, 2007. *FASEB J* 21: 591.2, 2007.
29. Dongaonkar RM, Laine GA, Stewart RH, Quick CM. Integrating Microvascular, Interstitial, and Lymphatic Function with a Balance Point Characterization of Interstitial Fluid Volume and Protein Regulation. Experimental Biology 2009, New Orleans, LA, April 18-22, 2009.

C. Professional membership & Service

Member:

American Physiological Society
Microcirculatory Society
Biomedical Engineering Society

Reviewer:

Lymphatic Research and Biology
Journal of Vascular Research