

## Publications:

- 1) **Abhay H. Pande**, Patricia Scaglione, Michael Taylor, Kathleen N. Nemec, Summer Tuthill, David Moe, Randall K. Holmes, Suren A. Tatulian, and Ken Teter. (2007) Conformational instability of the cholera toxin A1 polypeptide. **J. Mol. Biol.** 374 (4):1114-1128.
- 2) **Abhay H. Pande**, David Moe, Maneesha Jamnadas, Suren A. Tatulian, and Ken Teter. (2006) The pertussis toxin S1 subunit is a thermally unstable protein susceptible to degradation by the 20S proteasome. **Biochemistry** 45(46):13734-13740.
- 3) **Abhay H. Pande**, Shan Qin, Kathleen N. Nemec, Xiaomei He, and Suren A. Tatulian. (2006) Isoform-specific membrane insertion of secretory phospholipase A<sub>2</sub> and functional implications. **Biochemistry** 45(41):12436-47.
- 4) Kathleen N. Nemec, **Abhay H Pande**, Shan Qin, Ramona J Bieber Urbauer, Shuhua Tan, David Moe and Suren A. Tatulian.(2006) Structural and functional effects of tryptophans inserted into the membrane-binding and substrate-binding sites of human group IIA phospholipase A<sub>2</sub>.**Biochemistry** 45(41):12448-60.
- 5) Rajesh K Gupta<sup>□</sup>, **Abhay H Pande**<sup>□</sup>, Krishana C Gulla, Hans-J Gabius and Krishnan Hajela. (2006) Carbohydrate-induced modulation of cell membrane. VIII. Agglutination with mammalian lectin, galectin-1, increases osmofragility and membrane fluidity of trypsinized erythrocytes. **FEBS Lett.** 580(6):1691-1695<sup>□</sup> Both authors have contributed equally
- 6) **Abhay H. Pande**, Shan Qin and Suren A. Tatulian. (2005) Membrane fluidity is a key modulator of membrane binding and activity of 5-lipoxygenase. **Biophys. J.** 88, 1-11.
- 7) Shan Qin, **Abhay H Pande**, Kathleen N. Nemec, Xiaomei He, and Suren A. Tatulian. (2005) Evidence for the regulatory role of the N-terminal helix of secretory phospholipase A<sub>2</sub> from studies of native and chimeric proteins. **J. Biol. Chem.**, 280(44):36773-36783.
- 8) Suren A. Tatulian. Shan Qin, **Abhay H. Pande**, and Xiaomei He. (2005) Positioning Membrane Proteins by Novel Protein Engineering and Biophysical Approaches. **J. Mol. Biol.**<sup>□</sup> 351, 939-947. <sup>□</sup>Figures on Journal cover.
- 9) **Abhay H. Pande**<sup>□</sup>, David Moe<sup>□</sup>, Kathleen N. Nemec, Shan Qin, Shuhua Tan and Suren Tatulian. (2004) Regulation of human 5-lipoxygenase activity by membrane lipids. **Biochemistry** 43(46):14653-14666. <sup>□</sup>Both authors have contributed equally.
- 10) Shan Qin, **Abhay H. Pande**, Kathleen N. Nemec and Suren A. Tatulian. (2004) The N-terminal  $\alpha$ -helix of pancreatic phospholipase A<sub>2</sub> determines productive-mode orientation of the enzyme at the membrane surface. **J. Mol. Biol.** 344, 71–89.
- 11) **Abhay H. Pande**, Rajesh K. Gupta, Sumati and Krishnan Hajela. (2003) Oxidation of goat hepatic galectin-1 induces changes in secondary structure. **Protein and Peptide Letters** 10, 265-275.
- 12) Rajesh K Gupta, **Abhay H. Pande**, Sumati and Krishnan Hajela. (2003) ESR studies on F<sub>c</sub>-receptor mediated changes in lymphocyte membrane fluidity. **Ind. J. Biochem. Biophys.** 40, 59-61.

13) Jayeeta Dhar<sup>□</sup>, **Abhay H. Pande**<sup>□</sup>, Vasudha Sundram, Jagpreet S. Nanda, Shekhar C. Mande and Girish Sahni. (2002) Involvement of a nine-residue loop of streptokinase in the generation of macromolecular substrate-specificity by the activator complex through interaction with substrate kringle domain. **J. Biol. Chem.** 277, 13257-13267. <sup>□</sup>Both authors have contributed equally.

14) N. Hajela, **A. H. Pande**, S. Sharma, D. N. Rao and K. Hajela. (1999) Studies on a doubleheaded protease inhibitor from *Phaseolus mungo*. **J. Plant Biochemistry & Biotechnology** 8, 57-60.

15) **Abhay H. Pande**, Sumati, Namita Hajela and Krishnan Hajela. (1998) Carbohydrate induced modulation of cell membrane. VII. Binding of exogenous lectin increase osmofragility of erythrocytes. **FEBS Lett.** 427, 21-24.

16) Krishnan Hajela, **Abhay H. Pande** and Sumati. (1997) Carbohydrate induced modulation of cell membrane. VI. Binding of exogenous lectin induces susceptibility of erythrocytes to free radical damage: A spin label study. **FEBS Lett.** 406, 255-258.

### **Presentations (poster):**

1) Binding of metal ions to a soluble  $\beta$ -galactoside specific hepatic lectin induces conformation changes. **Abhay H. Pande** and Krishnan Hajela. Presented at the 65<sup>th</sup> Annual Meeting of SBC (I) held at I.I.Sc. Bangalore, India. Nov. 20-23, 1996.

2) Agglutination of erythrocytes by exogenous lectin induces susceptibility of erythrocytes to free radical damage. **Abhay H. Pande** and Krishnan Hajela. Presented at the International Symposium on Free Radicals in Medicine & Biology, held at R.N.T. Medical College, Udaipur, India. Sept 22-24, 1997.

3) Purification and properties of goat hepatic galectin. **Abhay H. Pande** and Krishnan Hajela. Presented at the 5<sup>th</sup> International Symposium on Biochemical Roles of Eukaryotic Cell Surface Macromolecules, held at I.I.Sc. Bangalore, India. Jan 7-8, 1999.

4) Mechanism of lipid-mediated interfacial activation of human 5-lipoxygenase. **Abhay H. Pande**, David Moe, Kathleen Nemec, Shan Qin, Shuhua Tan, and Suren A. Tatulian. Presented at 48<sup>th</sup> Biophysical Society Annual Meeting held at Baltimore, Maryland, Feb 14-18, 2004.

5) Positioning a peripheral protein at the membrane surface. Shan Qin, **Abhay H. Pande** and Suren A. Tatulian. Presented at 48<sup>th</sup> Biophysical Society Annual Meeting held at Baltimore, Maryland, Feb 14-18, 2004.

6) Membrane fluidity modulates interfacial activation of 5-lipoxygenase. **Abhay H. Pande**, Shan Qin, Suren A. Tatulian. Presented at 49<sup>th</sup> Biophysical Society Annual Meeting, Long Beach, California, Feb 12-16, 2005.