

Dr. Lakshna Mahajan

Publications:

Patent:

PCT (U.S.) Patent application number: 20080255043, published 16-10-2008.: Mahajan Lakshna, Sarma P Usha, Kishore Uday, Madan Taruna. "Human Lung Surfactant Protein, SP-D, Modulates Eosinophil Activation And Survival And Enhances Phagocytosis Of Apoptotic Eosinophils" (Indian patent Ref 153NF2006).

Research Publications:

1. Tripathi A. H., Kumari A., Chand G., Kumar R., Durgapal A., **Mahajan L.**, Joshi P. and Upadhyay S.K. An overview of phytomedicinal, ethnobotanical applications and phytochemical constituents of four major Agave species. **Indian Journal of Natural Products and Resources**. **2023** Jun; 14(2), June 2023, pp. 148-161. [**Impact factor: 0.192**, ISSN: 0976-0512].
2. **Mahajan, L.**, Saxena, S., Sarma, P. U. Phosphorus Compounds: Their Discovery in Biological World. **Indian J Clin Biochem**. **2018**. 33(3):243-245. [**Impact Factor: 0.38**, ISSN: 0970-1915].
3. Singh, M*., **Mahajan, L.***, Chaudhary, N., Kaur, S., Madan, T., Sarma, P. U. Murine models of Aspergillosis: Role of collectins in host defense. **Indian Journal of Experimental Biology (IJEB)**. **2015**. Vol. 53(11):691-700. *(Both authors contributed equally). [**Impact factor: 0.934**, ISSN:0019-5189].
4. **Mahajan L**, Gautam P, Dodagatta-Marri E, Madan T, Kishore U. Surfactant protein SP-D modulates activity of immune cells: proteomic profiling of its interaction with eosinophilic cells. **Expert Rev Proteomics**. **2014** Jun;11(3):355-69. [**Impact factor: 2.973**, ISSN: 1744-8387, (**Citations: 18**)].
5. **Mahajan L**, Pandit H, Madan T, Gautam P, Yadav AK, Warke H, Sundaram CS, Sirdeshmukh R, Sarma PU, Kishore U, Surolia A. Human surfactant protein D alters oxidative stress and HMGA1 expression to induce p53 apoptotic pathway in eosinophil leukemic cell line. **PLoS One**. **2013** Dec 31;8(12):e85046. [**Impact factor: 4.24**, ISSN · 1932-6203, (**Citations: 26**)].
6. Qaseem A. F., Sonar S., [Mahajan L.](#), [Madan T.](#), [Sorensen G. L.](#), [Shamji M. H.](#), [Kishore](#), U. **2013**. Linking surfactant protein SP-D and IL-13: Implications in asthma and allergy. **Mol Immunol**. **54**(1):98-107. [**Impact factor: 3.064**, ISSN: 0161-5890, (**Citations: 44**)].
7. Chaudhary N., **Mahajan L.**, Madan T., Kumar A., Raghava G. P., Katti S. B., Haq W., Sarma P.U.. **2009**. Prophylactic and Therapeutic Potential of Asp f1 Epitopes in Naïve and Sensitized BALB/c Mice. **Immune Netw**. 9(5):179-91. [**Impact factor: 3.111**, ISSN: 1598-2629, (**Citations: 3**)].
8. Upadhyay S. K., **Mahajan L.**, Ramjee S., Singh Y., Basir S.F., Madan T. **2009**. Identification and characterization of a laminin-binding protein of *Aspergillus fumigatus*: extracellular thaumatin domain protein (AfCalAp). **J Med Microbiol**. 58(Pt 6):714-22. [**Impact factor: 2.297**, ISSN: 1473-5644, (**Citations: 25**)].
9. **Mahajan L.**, Madan T., Kamal N., Singh V. K., Sim R. B., Telang S. D., Ramchand C. N., Waters P., Kishore U. and Sarma P. U. **2008**. Recombinant surfactant protein-D selectively increases apoptosis in eosinophils of allergic asthmatics and enhances

uptake of apoptotic eosinophils by macrophages. **International Immunology**. 20(8):993-1007. [Impact factor: 3.234, ISSN 1460-2377, (Citations: 41)].

10. Beg Q. K., Kapoor M., **Mahajan L.** and Hoondal G.S.. 2001. Microbial xylanases and their industrial applications: a review. **Appl Microbiol Biotechnol**. 56(3-4): 326-38. [Impact factor: 3.689, ISSN: 1432-0614 (Citations: 1616)].

Book Chapters

1. **Mahajan L.**, Puri N.K., and Kumar M. (2022). Chapter “Lung CT scans for the management of COVID-19 pneumonitis and the diagnosis of COVID-19”, **IOP Publishing Ltd** 2022, Chapter 10 for book Artificial Intelligence Strategies for Analyzing COVID-19 Pneumonia Lung Imaging, Volume 1. Characterization approaches. (ISBN: 978-0-7503-3795-3) Volume:1. <https://iopscience.iop.org/book/edit/978-0-7503-3795-3/chapter/bk978-0-7503-3795-3ch10.pdf>
2. **Mahajan L.**, Thakur G., Kaur A., Bulla R., Kishore U., and Madan T. (2021). Chapter “Surfactant Protein D in Immune Surveillance Against Cancer” for book “The Collectin Protein Family and Its Multiple Biological Activities”, **Springer Nature Switzerland AG**, pp.147-163 (ISBN:978-3-030-67047-4), Edition Number:1
3. A. Archana, **Lakshna Mahajan**, Safikur Rahman, R. Minakshi (2019). Invited Chapter “Post Translational Modifications In Human Therapeutics Produced In Plant-Expression Systems” for book “Dar - Protein Modificomics” **Elesvier Publications**, pp. 145-169 (ISBN: 978-0128119136).
4. **Lakshna Mahajan** and Ram Singh. 2017. Chapter on “Nutritional Deficiencies and Diseases associated with Alcoholism”, accepted for book “Alcoholism: Causes, Symptoms, Effects and Treatments”. **Manakin Press Private Limited**, New Delhi, India. ISBN 9789386677488
5. **Lakshna Mahajan**, Santosh K. Upadhyay, A. Archana, Poonam Gautam. 2016. Chapter on “Gut microbiota and human health” (Chapter.ID_36581), accepted for book “Industrial Microbiology: Microbes in Action” (Book ID: 5599) **Nova Publishers, USA**. ISBN: 978-1-63484-491-8
6. Tapish Dogra, **Lakshna Mahajan**, Santosh K. Upadhyay and Poonam Gautam. 2016. Chapter on “Human Pathogenic Fungi and their Survival Mechanisms in the Host” Chapter ID (Chapter ID: _36585), accepted for book “Industrial Microbiology: Microbes in Action” (Book ID: 5599) **Nova Publishers, USA**. ISBN: 978-1-63484-520-5
7. Rini Joshi, Tara Singh Bisht, **Lakshna Mahajan**, Poonam Gautam, Santosh Kumar Upadhyay. 2016. Chapter on “Use of microbes in production of vaccines”, accepted for book “Industrial Microbiology: Microbes in Action” (Book ID: 5599) **Nova Publishers, USA**. ISBN: 978-1-63484-520-5.