

**Syed Mansoor Ali, PhD**  
**Assistant Professor**  
**Translational Research Lab**  
Department of Biotechnology  
Jamia Millia Islamia, New Delhi-110025

Research Experience	16 years
Teaching Experience	15 years
Postdoctoral Experience	9 years
Publications	92
Total Impact factor	400+

### Research Interests:

1. Role of miRNAs in lung inflammation.
2. translational immunology in lung cancer and ARDS.
3. Bioinformatics and systems biology.

### Teaching Interests: (Experience; more than 12 years)

1. Cellular and Molecular Biology
2. Human Physiology

### Positions and Employment

- **Assistant Professor (March, 2016- Present)** - at Department of Biotechnology, Jamia Millia Islamia, New Delhi-110025.  
(Teaching of Immunology/Molecular Biology to Postgraduate classes of Biochemistry, Biotechnology and Bio-informatics students)
- **Associate Research Scientist (Faculty) (May2011-May 2015)** -Yale University School of Medicine, New Haven, CT, USA.  
(Research Mentorship role for MD/Ph.D. fellows, undergraduate students)
- **Postdoctoral Fellow (May2008-April2011)** - University of Illinois, Chicago, IL USA (Research Mentorship role for MD/Ph.D. fellows, undergraduate students)

### Current Research Group

PhD students : 4

PG Students : 6

### Funding/Grants:

1. **The role of miRNAs in metabolism and macrophage polarization in Non-small cell lung cancer (NSCLC)** – ICMR: PI
2. **Therapeutic potential of microRNA loaded lipid nanoparticles in neonatal and adult acute lung injury** – ICMR: PI
3. **“Role of miRNAs in lung development and injury”** Ramanujan Fellowship Research Grant- SERB : PI
4. **“Role of mitophagy in macrophage polarization and sepsis-induced acute lung injury”** Core Research Grant SERB-DST : PI
5. **“Integrating effects of Vitamin D and miRNAs in Lung Development and Injury”** - DBT: PI

## **Publication List**

1. Almaz Zaki, Mohd Mohsin, Salman Khan, Aman Khan, Shaniya Ahmad, Amit Verma, Shakir Ali, Tasneem Fatma, Mansoor Ali Syed (2024) Vitexin mitigates oxidative stress, mitochondrial damage, pyroptosis and regulates small nucleolar RNA host gene 1/DNA methyltransferase 1/microRNA-495 axis in sepsis-associated acute lung injury. ***Inflammopharmacology*** 1-20
2. Alvea Tasneem, Archana Sharma, Mansoor Ali Syed, Ravins Dohare (2024) Transcriptomic analysis delineates potential regulatory network as therapeutic alternatives in chronic myeloid leukemia. ***Egyptian Journal of Medical Human Genetics*** 25(1) 1-13
3. Prithvi Singh, Gulnaz Tabassum, Mohammad Masood, Saleha Anwar, Mansoor Ali Syed, Kapil Dev, Md Imtaiyaz Hassan, Mohammad Mahfuzul Haque, Ravins Dohare, Indrakant Kumar Singh (2024) Investigating the role of prognostic mitophagy-related genes in non-small cell cancer pathogenesis via multiomics and network-based approach. ***3 Biotech*** 14(11) 273
4. Gulnaz Tabassum, Ashok Kumar, Fatima Nazish Khan, Amit Kumar Verma, Saeeda Naz, Syed Mansoor Ali, Kapil Dev (2024) Phytochemicals as Potent Therapeutic Molecules in Cancer Treatment in Relation to Sustainable Agriculture System-Chapter. Recent Advancements in Sustainable Agricultural Practices: Harnessing Technology for Water Resources, Irrigation and Environmental Management, ***Springer Nature Singapore*** 283-312 (Chapter)
5. Mohamed Shiffa, Munawwar Husain Kazmi, Syed Mansoor Ali, Aleena Anwar, Mohammed Yasir, Nazeem Fahamiya, Mohammad Mahfuzul Haque (2024) n Vitro and In Vivo Anti-Inflammatory Activity of a Combination of Extracts from Cinnamomum zeylanicum, Alpinia galanga, and Withania somnifera used in Unani Medicine. ***Alternative Therapies in Health and Medicine***, 30 (5) 1-15
6. Aamir Khan, Sumit Sharma, Anwasha Das, Mumtaz Alam, Mansoor Ali Syed, Syed Ehtaishamul Haque (2024) D-Pinitol improves cognitive dysfunction and neuronal damage induced by isoproterenol via modulation of NF- $\kappa$ B/BDNF/GFAP signaling in Swiss albino mice. ***Iranian Journal of Basic Medical Sciences***, 27 (3) 226
7. Aiman Mushtaq, Prithvi Singh, Gulnaz Tabassum, Taj Mohammad, Md Imtaiyaz Hassan, Mansoor Ali Syed, Ravins Dohare (2023) Unravelling hub genes as potential therapeutic targets in lung cancer using integrated transcriptomic meta-analysis and in silico approach. ***Journal of Biomolecular Structure and Dynamics***, 41 (18) 9089-9102
8. Archana Sharma, Prithvi Singh, Rishabh Jha, Saleh A Almatroodi, Faris Alrumaihi, Arshad Husain Rahmani, Haged Obaid Alharbi, Ravins Dohare, Mansoor Ali Syed (2023) Exploring the role of miR-200 family in regulating CX3CR1 and CXCR1 in lung adenocarcinoma tumor microenvironment: implications for therapeutic intervention. ***Scientific Reports*** 16333
9. Mohd Junaid Khan, Prithvi Singh, Prakash Jha, Arnab Nayek, Md Zubair Malik,

Ganesh Bagler, Bhupender Kumar, Kalaiarasan Ponnusamy, Shakir Ali, Madhu Chopra, Ravins Dohare, Indrakant Kumar Singh, **Mansoor Ali Syed** (2023) Investigating the link between miR-34a-5p and TLR6 signaling in sepsis-induced ARDS. *3 Biotech* 13 (8), 282 [IF:29]

10. Ashif Iqbal, Abul Kalam Najmi, Shadab Md, Huda Mohammed Alkreathy, Javed Ali, **Mansoor Ali Syed**, Syed Ehtaishamul Haque (2023) Oral delivery of nerolidol alleviates cyclophosphamide-induced renal inflammation, apoptosis, and fibrosis via modulation of NF- $\kappa$ B/cleaved caspase-3/TGF- $\beta$  signaling molecules. *Drug Delivery* 30 (1), 2241661 [IF:6.81]
11. Prithvi Singh, Archana Sharma, Bhupender Kumar, Anuradha Sinha, **Mansoor Ali Syed**, Ravins Dohare (2023) Integrative multiomics and weighted network approach reveals the prognostic role of RPS7 in lung squamous cell carcinoma pathogenesis. *Journal of Applied Genetics*, 1-12 [IF:265]
12. Prithvi Singh, Shweta Arora, Md Amjad Beg, Sibasis Sahoo, Arnab Nayek, Mohd Mabood Khan, Anuradha Sinha, Md Zubair Malik, Fareeda Athar, Mohammad Serajuddin, Ravins Dohare, **Mansoor Ali Syed** (2023) Comprehensive multiomics and in silico approach uncovers prognostic, immunological, and therapeutic roles of ANLN in lung adenocarcinoma. *Functional & integrative genomics* 23 (3), 239 [IF:3.67]
13. Prithvi Singh, Mohd Mohsin, Armiya Sultan, Prakash Jha, Mohd Mabood Khan, **Mansoor Ali Syed**, Madhu Chopra, Mohammad Serajuddin, Arshad Husain Rahmani, Saleh A Almatroodi, Faris Alrumaihi, Ravins Dohare (2023) Combined Multiomics and In Silico Approach Uncovers PRKAR1A as a Putative Therapeutic Target in Multi-Organ Dysfunction Syndrome. *ACS omega* 8 (10), 9555-9568 [IF:6.4]
14. Ahmad Almatroudi, Mohammed A Alsahli, **Mansoor Ali Syed**, Amjad Ali Khan, Arshad Husain Rahmani (2022) Regulation of Pro-Inflammatory Macrophage Polarization via Lipid Nanoparticles Mediated Delivery of Anti-Prostaglandin-E2 siRNA. *Current Issues in Molecular Biology* 45 (1), 1-11 [IF:4.13]
15. Shaniya Ahmad, Almaz Zaki, Kailash Manda, Anant Mohan, **Mansoor Ali Syed** (2022) Vitamin-D ameliorates sepsis-induced acute lung injury via augmenting miR-149-5p and downregulating ER stress. *The Journal of Nutritional Biochemistry* 110, 109130 [IF:6.117]
16. Aamir Khan, Ashif Iqbal, Mohd Wasim, Mansoor Ali Syed, Syed Ehtaishamul Haque (2022) D-pinitol attenuates isoproterenol-induced myocardial infarction by alleviating cardiac inflammation, oxidative stress and ultrastructural changes in Swiss albino mice. *Clinical and Experimental Pharmacology and Physiology* 49 (11), 1232-1245 [IF:2.96]
17. Aarfa Queen, Humaira Naaz Bhutto, Mohd Yousuf, **Mansoor Ali Syed**, Md Imtaiyaz Hassan (2022) Carbonic anhydrase IX: A tumor acidification switch in heterogeneity and chemokine regulation. *Seminars in Cancer Biology* 86, 899-913 [IF:17.1]
18. Shweta Arora, Salman Khan, Almaz Zaki, Gulnaz Tabassum, Mohd Mohsin, Humaira Naaz Bhutto, Tanveer Ahmad, Tasneem Fatma, **Mansoor Ali Syed**

- (2022) Integration of chemokine signaling with non-coding RNAs in tumor microenvironment and heterogeneity in different cancers. *Seminars in Cancer Biology* 86, 720-736 [IF:17.1]
19. Aiman Mushtaq, Prithvi Singh, Gulnaz Tabassum, Taj Mohammad, Md Imtaiyaz Hassan, **Mansoor Ali Syed**, Ravins Dohare (2022) Unravelling hub genes as potential therapeutic targets in lung cancer using integrated transcriptomic meta-analysis and in silico approach. *Journal of Biomolecular Structure and Dynamics*, 1-14 [IF:5.23]
  20. Saleh A Almatroodi, Amjad Ali Khan, Abdulaziz A Aloliqi, **Mansoor Ali Syed**, Arshad Husain Rahmani (2022) Therapeutic Potential of *Tamarix aphylla* in the Prevention of Lung Injury through the Regulation of Inflammation, Oxidative Stress and Cell-Signaling Molecules. *Applied Sciences* 12 (19), 9925 [IF:2.74]
  21. Shaniya Ahmad, Madiha Abbas, Mohammad Fahad Ullah, Moammir H Aziz, Ozal Beylerli, Majid Ali Alam, **Mansoor Ali Syed**, Shahab Uddin, Aamir Ahmad (2022) Long non-coding RNAs regulated NF- $\kappa$ B signaling in cancer metastasis: Micromanaging by not so small non-coding RNAs. *Seminars in Cancer Biology* 85, 155-163 [IF:17.1]
  22. Shweta Arora, Prithvi Singh, Gulnaz Tabassum, Ravins Dohare, **Mansoor Ali Syed** (2022) miR-16-5p regulates aerobic glycolysis and tumorigenesis of NSCLC cells via LDH-A/lactate/NF- $\kappa$ B signaling. *Life Sciences* 304, 120722 [IF:6.1]
  23. Shweta Arora, Prithvi Singh, Gulnaz Tabassum, Ravins Dohare, **Mansoor Ali Syed** (2022) miR-495–3p regulates sphingolipid metabolic reprogramming to induce Sphk1/ceramide mediated mitophagy and apoptosis in NSCLC. *Free Radical Biology and Medicine* 189, 71-84 [IF:7.4]
  24. Mohd Mohsin, Prithvi Singh, Salman Khan, Amit Kumar Verma, Rishabh Jha, Mohammed A Alsahli, Arshad Husain Rahmani, Saleh A Almatroodi, Faris Alrumaihi, Nisha Kaprwan, Kapil Dev, Ravins Dohare, **Mansoor Ali Syed** (2022) Integrated transcriptomic and regulatory network analyses uncovers the role of let-7b-5p, SPIB, and HLA-DPB1 in sepsis. *Scientific Reports* 12 (1), 11963 [IF:3.9]
  25. Ahmad Almatroudi, Mohammed A Alsahli, **Mansoor Ali Syed**, Amjad Ali Khan, Arshad Husain Rahmani (2022) Prostaglandin D<sub>2</sub> Attenuates Lipopolysaccharide-Induced Acute Lung Injury through the Modulation of Inflammation and Macrophage Polarization. *Applied Sciences* 12 (12), 6076 [IF:2.7]
  26. Prakash Jha, Prithvi Singh, Shweta Arora, Armiya Sultan, Arnab Nayek, Kalaiarasan Ponnusamy, **Mansoor Ali Syed**, Ravins Dohare, Madhu Chopra (2022) Integrative multiomics and in silico analysis revealed the role of ARHGEF1 and its screened antagonist in mild and severe COVID-19 patients. *Journal of Cellular Biochemistry* 123 (3), 673-690 [IF:4]
  27. Kavita Sharma, Kanipakam Hema, Naveen Kumar Bhatraju, Ritushree Kukreti, Rajat Subhra Das, Mohit Dayal Gupta, **Mansoor Ali Syed**, MA Qadar Pasha (2022) The deleterious impact of a non-synonymous SNP on protein structure

and function is apparent in hypertension. *Journal of Molecular Modeling* 28, 1-17 [IF:2.14]

28. A Iqbal, M Wasim, M Ashraf, AK Najmi, **MA Syed**, J Ali, SE Haque (2021) Natural bioactive as a potential therapeutic approach for the management of cyclophosphamide-induced cardiotoxicity. *Current Topics in Medicinal Chemistry* 21 (29), 2647-2670 [IF:3.45]
29. Shweta Arora, Prithvi Singh, Shaniya Ahmad, Tanveer Ahmad, Ravins Dohare, Saleh A Almatroodi, Faris Alrumaihi, Arshad Husain Rahmani, **Mansoor Ali Syed** (2021) Comprehensive Integrative Analysis Reveals the Association of KLF4 with Macrophage Infiltration and Polarization in Lung Cancer Microenvironment. *Cells* 10;8, 291[IF:6.4]
30. Archana Sharma, Shaniya Ahmad, Tanveer Ahmad, Shakir Ali, **Mansoor Ali Syed** (2021) Mitochondrial dynamics and mitophagy in lung disorders. *Life Sciences*, 119876 [IF:5.1]
31. Ashif Iqbal, Mohd Wasim, Mohd Ashraf, Abul Kalam Najmi, **Mansoor Ali Syed**, Javed Ali, Syed Ehtaishamul Haque (2021) Natural Bioactive as a Potential Therapeutic Approach for the Management of Cyclophosphamide-induced Cardiotoxicity. *Current Topics in Medicinal Chemistry* [IF:3.29]
32. Kavita Sharma, Neha Chanana, Ghulam Mohammad, Tashi Thinlas, Mohit Gupta, **Mansoor Ali Syed**, Rajat Subhra Das, Qadar Pasha, Aastha Mishra (2021) Hypertensive Patients Exhibit Enhanced Thrombospondin-1 Levels at High-Altitude. *Life*, 11;9 [IF:3.81]
33. Kavita Sharma, Prithvi Singh, Md Amjad Beg, Ravins Dohare, Fareeda Athar, **SYED MA** (2021) Revealing new therapeutic opportunities in hypertension through network-driven integrative genetic analysis and drug target prediction approach. *Gene*, 80;1 [IF:3.68]
34. Kavita Sharma, Aastha Mishra, Himanshu N Singh et al., **Syed MA**, MA Pasha (2021) High-altitude pulmonary edema is aggravated by risk-loci and associated transcription factors in HIF-prolyl hydroxylases. *Human molecular genetics*, ddab139 [IF:6.1]
35. M Mohsin, G Tabassum, S Ahmad, S Ali, **Syed MA** (2021) The Role of Mitophagy in Pulmonary Sepsis. *Mitochondrion* 59, 63-75 [IF:4.2]
36. S Khan, M Masood, H Gaur, S Ahmad, **Syed MA** (2021) Long non-coding RNA: An immune cells perspective. *Life Sciences*, 119152 [IF:5.09]
37. Singh P, Sharma A, R Jha, S Arora, R Ahmad, AH Rahmani, **Syed MA** (2020) Transcriptomic analysis delineates potential signature genes and miRNAs



associated with the pathogenesis of asthma. *Scientific reports* 10 (1), 1-13 [IF: 4.4]

38. Khan MJ, Singh P, Dohare R, R Jha, AH Rahmani, SA Almatroodi, S Ali, **Syed MA** (2020) Inhibition of miRNA-34a Promotes M2 Macrophage Polarization and Improves LPS-Induced Lung Injury by Targeting Klf4. *Genes* 11 (9), 966 [IF: 4.1]
39. Arora S, P Singh, R Dohare, R Jha, **Syed MA** (2020) Unravelling host-pathogen interactions: ceRNA network in SARS-CoV-2 infection (COVID-19). *Gene* 145057 [IF: 3.68]
40. S Ahmad, S Arora, S Khan, M Mohsin, A Mohan, K Manda. **Syed MA** (2020) VITAMIN D AND ITS THERAPEUTIC RELEVANCE IN PULMONARY DISEASES. The *Journal of Nutritional Biochemistry*, 108571 [IF: 6.1]
41. Bhatt S, Singh P, Sharma A, A Rai, R Dohare, S Sankhwar, A Sharma, **Syed MA** (2020) Deciphering key genes and miRNAs associated with Hepatocellular carcinoma via network-based approach. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*. 2020/8/14 [IF: 3.7]
42. Arora S, Singh P, AH Rahmani, SA Almatroodi, R Dohare, **Syed MA** (2020) Unravelling the Role of miR-20b-5p, CCNB1, HMGA2 and E2F7 in Development and Progression of Non-Small Cell Lung Cancer (NSCLC) *Biology* 9 (8), 201. [IF: 5.1]
43. Das P, Curstedt T, Agarwal B, **Syed MA**, Salomone F, Casiraghi C, Pelizzi N, Bhandari V. (2020) Small Molecule Inhibitor Adjuvant Surfactant Therapy Attenuates Ventilator- And Hyperoxia-Induced Lung Injury in Preterm Rabbits. *Frontiers in Physiology*. 2020 Apr 9; 11:266. [IF: 4.5]
44. Almatroodi SA, Almatroudi A, Alsahli MA, Aljasir MA, Syed MA, Rahmani AH (2020) Epigallocatechin-3-Gallate (EGCG), an Active Compound of Green Tea Attenuates Acute Lung Injury Regulating Macrophage Polarization and Krüppel-Like-Factor 4 (KLF4) Expression. *Molecules*. 2020 Jun 20;25(12):2853. doi: 10.3390/molecules25122853. [IF: 4.4]
45. R Ahmad, M Khan, P Mishra, N Jahan, MA Ahsan, I Ahmad, MR Khan, Syed MA (2020) Engineered hierarchical CuO nanoleaves based electrochemical nonenzymatic biosensor for glucose detection. *Journal of the Electrochemical Society* 168 (1), 017501 [IF: 4.3]
46. Iqbal A, **Syed MA**, Ali J, Najmi AK, Haque MM, Haque SE (2020) Nerolidol protects the liver against cyclophosphamide-induced hepatic inflammation,

apoptosis, and fibrosis via modulation of Nrf2, NF- $\kappa$ B p65, and caspase-3 signaling molecules in Swiss albino mice. *Biofactors*, 2020 Sep 17. doi: 10.1002/biof.1679 [IF: 6.1]

47. Iqbal A, **Syed MA**, Najmi AK, F Azam, GE Barreto, MK Iqbal, J Ali, Haque SE (2020) Nano-engineered nerolidol loaded lipid carrier delivery system attenuates cyclophosphamide neurotoxicity—Probable role of NLRP3 inflammasome and caspase-1. *Experimental Neurology*, 113464 [IF: 5.33]
48. **Syed MA**, Das P, Pawar A, Aghai ZH, Kaskinen A, Zhuang ZW, Ambalavanan N, Pryhuber G, Andersson S, Bhandari V (2017) Hyperoxia causes miR-34a-mediated injury via angiopoietin-1 in neonatal lung. *Nature Communications*, 8(1): 1173 [IF: 14.91]
49. Iqbal MA, Arora S, Prakasam G, Calin GA, **Syed MA** (2018) MicroRNA in lung cancer: Role, mechanisms, pathways and therapeutic relevance. *Molecular Aspects of Medicine*, 2018 Aug 10. doi: 10.1016/j.mam.2018.07.003. [IF: 14.3]
50. Iqbal A, **Syed MA**, Najmi AK, Ali J, Alam MM, Haque SE (2019) Ameliorative effect of nerolidol on cyclophosphamide-induced gonadal toxicity in Swiss Albino mice: Biochemical-, histological- and immunohistochemical-based evidences *Andrologia*. May;52(4):e13535. [IF: 2.77]
51. Piersigilli F, **Syed MA**, et al., Pietro Bagolan, and Vineet Bhandari (2020) An omic approach to congenital diaphragmatic hernia: a pilot study of genomic, Microrna and metabolomic profiling. *Journal of Perinatology*. 2020 Feb 20 [IF: 2.5]
52. Singh P, Rai A, Dohare R, Arora S, Ali S, Parveen S, **Syed MA**. (2020) Network-based Identification of Signature Genes KLF6 and SPOCK1 Associated with Oral Submucous Fibrosis. *Molecular and Clinical Oncology*. 2020 Feb 20
53. Ahmed R, Khan M, Tripathy, N et. al, **Syed MA**, Khosla A (2020) Nano-donuts shaped nickel oxide nanostructures for sensitive non- enzymatic electrochemical detection of glucose. <https://doi.org/10.1007/s00542-020-04754-4>. *Microsystem Technologies*. [IF: 2.27]
54. Ahmad S, Singh P, Sharma A, Arora A, Shriwash N, Rahmani AH, Almatroodi SA, and Syed MA. (2019) Transcriptome Meta-Analysis Deciphers a Dysregulation in Immune Response- Associated Gene Signatures during Sepsis. *Genes*, 10, 1005; doi:10.3390/genes10121005. [IF: 4.1]
55. Pragnya D, et al **Syed MA** Acharya S. (2019) Novel Chitohexaose Analog Protects Young and Aged mice from CLP Induced Polymicrobial Sepsis. *Scientific Reports*, Feb

27;9(1):2904 [IF: 4.37]

56. Ahmad R, Tripathy N, Khosla A, Khan M, et al. **Syed MA**, and Hahn YB. (2020) Review-Recent Advances in Nanostructured Graphitic Carbon Nitride as a Sensing Material for Heavy Metal Ions. *Journal of The Electrochemical Society*, 2020167037519. [IF: 4.3]
57. Khan M, Ahmed R, Tripathy, N et al **Syed MA**. (2019) Fabrication of an ultra-sensitive hydrazine sensor based on nano-chips shaped nickel hydroxide modified electrodes. *Microsystem Technologies*, <https://doi.org/10.1007/s00542-019-04721-8>. [IF: 2.27]
58. Pantouris G, Ho J, Shah D, **Syed MA**, Leng L, Bhandari V, Bucala R, Batista VS, Loria JP, Lolis E. (2018) Nanosecond Dynamics Regulate the MIF-Induced Activity of CD74. *Angew Chem Int Ed Engl*. 2018 Apr 18. doi: 10.1002/anie.201803191. [IF: 15.3]
59. Siddiqui FA, Prakasam G et al., **Syed MA** and Iqbal MA. (2018) Curcumin decreases Warburg effect in cancer cells by down-regulating pyruvate kinase M2 via mTOR-HIF1 $\alpha$  inhibition. *Scientific Reports*, Apr 2018 [IF: 4.3].
60. Arora S, Ahmad S, , Dev K,... Husain M, Ali S, Mohan A, **Syed MA** (2019) TLRs in pulmonary diseases. *Life Sciences*. 2019 Sep 15; 233:116671. doi: 10.1016/j.lfs.2019.116671. [IF: 5.03]
61. Iqbal A, Sharma S, Ansari MA, Najmi AK, **Syed MA**, Ali J, Alam MM, Ahmad S, Haque SE (2019). Nerolidol attenuates cyclophosphamide-induced cardiac inflammation, apoptosis and fibrosis in Swiss Albinomice. *European Journal of Pharmacology*. 2019 Sep 18:172666. doi: 10.1016/j.ejphar.2019.172666. [IF: 4.43]
62. Iqbal A, Sharma S, Najmi AK, **Syed MA**, Ali J, Alam MM, Haque SE (2019). Nerolidol ameliorates cyclophosphamide-induced oxidative stress, neuroinflammation and cognitive dysfunction: Plausible role of Nrf2 and NF- $\kappa$ B. *Life Sciences*. 2019 Sep 11:116867. doi: 10.1016/j.lfs.2019.116867. [IF: 5.03]
63. Nitesh Shriwash, Prithvi Singh, Shweta Arora, **Syed MA**, Sher Ali, Ravins Dohare (2019) Identification of differentially expressed genes in small and non-small cell lung cancer based on meta-analysis of mRNA. *Heliyon* 5 (2019) e01707.
64. Khan V, Sharma S, Bhandari U, **Syed MA**, Haque SE. (2017) Raspberry ketone protects against isoproterenol-induced myocardial infarction in rats. *Life Sciences* 1;194: 12: 205-09 [IF: 5.03]



65. Iqbal A, et al., **Syed MA**, Ali J, Haque SE (2019) Molecular mechanism involved in cyclophosphamide-induced cardiotoxicity: Old drug with a new vision. *Life Sciences*. Feb 1;218: 112-131 {Review} [IF: 5.03]
66. Shweta Arora, Kapil Dev, Beamon Agarwal, Pragnya Das, **Syed MA** (2017). Macrophages: Their role, activation and polarization in pulmonary diseases. *Immunobiology*, 223(4-5): 383-88 [IF: 3.14].
67. Pragnya D, **Syed MA**, Dilip S, Bhandari V (2018) miR34a: a master regulator in the pathogenesis of bronchopulmonary dysplasia. *Cell Stress*, Vol. 2, No. 2, pp. 34 - 36; doi: 10.15698/cst2018.02.124
68. Sureshbabu A, **Syed MA**, Das P, Janér C, Pryhuber G, Rahman A, Andersson S, Homer RJ, Bhandari V (2016) Inhibition of Regulatory-Associated Protein of Mechanistic Target of Rapamycin Prevents Hyperoxia-Induced Lung Injury by Enhancing Autophagy and Reducing Apoptosis in Neonatal Mice. *American Journal of Respiratory Cell and Molecular Biology*, 55(5):722-735. [IF:6.9]
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72. Gamm U, Huang B, **Syed MA**, Zhang X, Bhandari V, and Choma M (2015). Quantifying hyperoxia-mediated damage to mammalian respiratory cilia-driven fluid flow using particle tracking velocimetry-optical coherence tomography. July 27, 2015, *Journal of Biomedical Optics*, 20(8):80505 PMID: 26308164 [IF: 3.17].
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74. Ranjan R, Lee YG, Karpurapu M, **Syed MA**, Chung S, Deng J, Jeong JJ, Zhao G, Xiao L, Sadikot RT, Weiss MJ, Christman JW, Park GY (2014). P47-phox and reactive oxygen species production modulate expression of microRNA-451 in macrophages. *Free Radical Research*. 2015 Jan; 49(1):25-34. PMID: 25287330 [IF: 4.14]
75. Rajasekaran D, Zierow S, **Syed MA**, Bucala B, Bhandari V, and Lolis EJ (2014) Targeting distinct tautomerase sites of D-DT and MIF with a single molecule for inhibition of neutrophil lung recruitment. *FASEB Journal*. 2014 Jul 11, 28(11):4961-71. PMID: 25016026 [IF: 5.19]
76. Lang SM, **Syed MA**, Dziura J, Rocco E, Kirshbom P, Bhandari V and Giuliano JS (2014) The effect of modified ultrafiltration on angiotensins in pediatric cardiothoracic surgery. *Annals of Thoracic Surgery* 98 (5): 1699-1704. PMID: 25258157 [IF: 4.33]
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80. Yuan Z, Panchal D, **Syed MA**, Mehta H, Joo M, Hadid W and Sadikot RT (2013). Induction of cyclooxygenase-2 signaling by *stomatococcus mucilaginosus* highlights the pathogenic potential of an oral commensal. *Journal of Immunology*, Oct 1; 191(7):3810-7. PMID: 24018272 [IF: 5.42]
81. Sun H, Choo-Wing R, Fan J, Leng L, **Syed MA**, Hare AA, Jorgensen WL, Bucala R, Bhandari V (2013). Small molecular modulation of macrophage migration inhibitory factor in the hyperoxia-induced mouse model of bronchopulmonary dysplasia. *Respiratory Research*. 2013 Feb 28; 14(1):27. PMID: 23448134 [IF: 5.6]
82. Fan C, Rajasekaran D, **Syed MA**, Leng L, Loria JP, Bhandari V, Bucala R, Lolis EJ (2013). MIF intersubunit disulfide mutant antagonist supports activation of CD74 by endogenous MIF trimer at physiologic concentrations. *Proceedings of National*

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89. Jain, GC and **Syed MA** (2007) Effect of ethanolic extract of Cassia alata (L.) flowers on reproductive functions of male albino rats (2007). *Journal of Experimental Zoology India* v. 10(1): p.129-132.
90. **Syed MA** and Husain SY. (2009) Practical Manual of Biotechnology (**Book**). *Aavishkar Publications*, 2009, viii, 192 p, ISBN: 81-7910-279-4. (Book)
91. Aggrwal A, Mahajan N, **Syed MA**, Paudyal B, Swapan K. Nath, and Shah D. (2016) Reactive Oxygen Species: Physiology and Pathogenesis in Systemic Lupus Erythematosus. *Reactive Oxygen Species in Biology and Human Health*. CRC Press ISBN: 9781498735452. (Book Chapter)
92. Kavita Sharma, Syed Yawer Husain, Pragya Das, Mohammad Hussain, **Syed MA** (2017) Regenerative Potential of Mesenchymal Stem Cells: Therapeutic

Applications in Lung Disorder.s Vol. 2, Chapter 7, Liver, Lung and Heart Regeneration, Part of the series Stem Cells in Clinical Applications pp 77-117, [\*Springer International Publishing AG. Part of Springer Nature\*](#). ISBN: 978-3-319-46692-7 (Book Chapter)

### **Selected Published and presented Abstracts**

1. **Syed MA** (2022) Role of vitD in environmental lung diseases. Presented in International conference of sustainable development and climate change, held at Jaipur Rajasthan
2. **Syed MA** (2022) Effects on mitochondrial health in environmental lung diseases, Presented in International conference on impact of environment, food and nutrition on human health held at Jaipur Rajasthan.
3. **Syed MA et al** (2018) Role of TREM1-Ripk3 axis in hyperoxia induced lung injury in neonates. *European Respiratory Journal* 52 (suppl 62), PA1382. Presented in [\*European Respiratory Society Meeting\*](#) (15-19 Sep, 2018) held at Paris France.
4. Shweta Arora and **Syed MA** (2018) Effect of miR-34a overexpression on macrophage polarization and metabolic targets in lung cancer. Presented in [\*International symposium on Infectious diseases\*](#) (12-14 Nov, 2018) held at New Delhi.
5. **Syed MA** (2018) Postnatal Inflammation: Role of hyperoxia and macrophage polarization. Presented in [\*International symposium on Infectious diseases\*](#) (12-14 Nov, 2018) held at New Delhi.
6. **Syed MA** (2017) Therapeutic Potential of MSCs and MSCs driven conditioned media in neonatal lung disease (23-26 May, 2017) in [\*EMBO International Conference on Advances in stem cells and regenerative medicine\*](#) held at Heidelberg, Germany.
7. Invited Talk- **Syed MA** (2017) Therapeutic role of Mesenchymal stem Cells in lung injury (5-7 Oct, 2017) in [\*International Conference on Fight against cancer\*](#) at CSJM University, Kanpur.
8. Invited Talk- **Syed MA** (2017) Role of miRNA in neonatal lung injury (22-23 Dec. 2017) in [\*National seminar on cancer Prevention and treatment strategies\*](#) at University of Rajasthan, Jaipur.
9. Invited Talk- **Syed MA** (2017) Effect of Air pollution on lung health (14-16 April, 2017) in [\*IPSA International Conference on Globalization & Sustainable development: Quest for New Paradigm\*](#) at University of Rajasthan, Jaipur.

10. Invited Talk-**Syed MA** (2016) Role of TREM-1 in Lung Inflammation and Injury (2016) in 1<sup>st</sup> *International Conference on Human Implication of Biotechnology 2016* at Central University of Bihar, Patna (Invited talk).
11. **Syed MA**, Choo-Wing R, Homer RJ, Bhandari V (2015) Role of Nitric oxide isoforms in vascular and alveolar development and lung injury in vascular endothelial growth factor (VEGF) overexpressing neonatal mice lungs. *American Journal of Respiratory and Critical Care Medicine* 191:A5475 (American Thoracic Society meeting 2015)
12. Gheorghe C, **Syed MA**, M Müller, J Williams, D Surbek, J Copel, L Niklason, M Paidas, V Bhandari (2015) Mesenchymal stem cells improves alveolarization in experimental bronchopulmonary dysplasia (BPD) via a paracrine mechanism. *American Journal of Respiratory and Critical Care Medicine* 191:A6086 (American Thoracic Society meeting 2015)
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15. **Syed MA** and Bhandari V. TREM-1 Signaling Modulates Hyperoxia-Induced Lung Injury in Neonatal Mice. *American Journal of Respiratory and Critical Care Medicine*. 2014:A2316 (American Thoracic Society meeting 2014)
16. Yuan Z, **Syed MA**, Panchal D, Joo M, Colonna M, Brantly ML, Sadikot RT. TREM-1 Induced Immune Response To LPS In Macrophages Is Regulated By Differential Expression Of Key MicroRNAs *American Journal of Respiratory and Critical Care Medicine* 2014:A2765 (American Thoracic Society meeting 2014)
17. **Syed MA**, Choo-Wing R, Harijith A, Homer RJ, Bhandari V. Hyperoxia and Interferon- $\gamma$  Induced Injury in Developing Lungs Occur via Cox2 and the ER stress dependent pathway. *American Journal of Respiratory and Critical Care Medicine*. 2013:A3260 (American Thoracic Society meeting 2013)
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19. Panchal D, Yuan Z, Rodgers D, **Syed MA**, Schraufnagel DE, Christman J, Finn P, Sadikot



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22. Yuan Z, **Syed MA**, Panchal D, Rogers D, Joo M, Sadikot RT. Curcumin Inhibits LPS Induced TREM-1 Expression By Attenuating Acetylation Of Histone 3 And 4 In The p65 Binding Region Of The TREM-1 Promoter, *American Journal of Respiratory and Critical Care Medicine* 185; 2012 :A3703 (American Thoracic Society meeting 2012)
23. **Syed MA**, Rodger D, Joo M, Abbas Z and Sadikot RT. TREM-1 inhibit apoptosis of macrophage by inducing Egr2 signaling. *American Journal of Respiratory and Critical Care Medicine*, 183:A1080 (American Thoracic Society meeting 2011)
24. Gye Young Park, **Syed MA**, H Park, R Ranjan, R Frey, Lei Xiao, RT Sadikot and JW Christman: 2011, The P47phox Component Of NADPH Oxidase Regulates MiRNAs Expression In Macrophages. *American Journal of Respiratory and Critical Care Medicine* 183; 2011:A5974 (American Thoracic Society meeting 2011)
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28. Javaid K, **Syed MA**, Joo M and Sadikot RT. Expression of TREM-1 Prolongs Macrophage Survival in Response to LPS. *American Journal of Respiratory and Critical Care Medicine* 183; 2009: A1355 (American Thoracic Society Meeting, 2009)
29. **Syed MA**, Joshi SC and Jain GC. Hypolipidaemic and Antioxidant effect of *Zingiber*

*officinale* extract in cholesterol fed rats, National Seminar on Frontiers of Biosciences in New millennium-2006, Jaipur.

30. Sharma B, Sharma PK, Katoch VM, Sharma VD and **Syed MA**. Genotyping of *Mycobacterium tuberculosis* isolates by Mycobacterial Interspersed Repetitive Units (MIRUs). Presented in National Academy of Science Meeting, 2004 in Jaipur, Rajasthan. INDIA
31. Sharma PK, Ahmed S, Gupta BL and **Syed MA**. A Comparative study of AFB smear, BACT/Alert- 3D culture and polymerase chain reaction using different clinical samples, National Academy of Science Meeting, 2004, Jaipur
32. **Syed MA**, Gupta UC and Jain GC. Investigation of the antifertility effect of *Cassia alata* Linn in male rats" National conference on recent advances in reproductive health-2001 India.
33. **Syed MA**, Jain GC. And Joshi SC. Hypolipidaemic and antioxidant action of ethanolic extract of *Bacopa monniera* in cholesterol fed rats" presented in 29th Annual conference of association of clinical biochemists of India-2000, Jaipur.
34. **Syed MA**, Jain GC. And Joshi SC. Study of the hypolipidaemic effect of *Panax ginseng* in cholesterol fed rats" presented in conference 'scope and Opportunities in the research and business of Medicinal and Aromatic Plants-1999' India.

### Honors/Awards

- Ramanujan Fellowship Award- Role of miRNA in lung injury and Development. (2015-2020)- SERB
- Section Editor, SM journal of Pulmonary Medicine (2014-)
- Guest Editor, Mediators of Inflammation (2016)

**Reviewer** • Molecular Biology Reports • Immunobiology Scientific Reports • Toxicology and Applied Pharmacology • Mediators of Inflammation • PLOS one • International Journal of COPD • International Journal of Interferon, cytokine and Mediator Research • International Journal of Biology • Journal of Molecular Biology Research • Clinical Research in pulmonology • Pediatric Health, Medicine and Therapeutics • The Nucleus • Tumor Biology • Journal of Herbs, Spices and Medicinal Plants • International Journal of Occupational Medicine and Environmental Health • Natural Product Research • Global Journal of Health Science • African Journal of Biotechnology • Gene • Molecular Biology Reports etc.