

JATA SHANKAR Ph.D., Professor

Education: M. Sc Biotechnology (Through JNU Test, Delhi), Calicut University, Calicut, Kerala, 2001
Ph. D., Institute of Genomics and Integrative Biology-IGIB, (CSIR) and Jamia Millia Islamia-Central University (NIRF-3), New Delhi 2006

Post-doc-fellow; School Medicine Stanford University USA

<http://scholar.google.co.in/citations?user=PQvRT9IAAAAJ&hl=en>

<http://www.juit.ac.in/faculty.php?id=311&dep=bio&page=0>

<https://orcid.org/0000-0003-4993-9580>

Scopus ID: 8250975000

Loop profile: 181530

https://www.researchgate.net/profile/Jata_Shankar

Profile URL: <https://vidwan.inflibnet.ac.in/profile/175647>



Coordinator: M. Tech Biotechnology Program, Mentoring

Biotechnology & Bioinformatics , JUIT

Chairperson: Disciplinary committee, JUIT

Professional Experience

Professor	Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wanknaghat Solon (H.P.) India	Jan 1 223-
Associate Professor	Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wanknaghat Solon (H.P.) India	Sep 2017- 31 Dec 2022
Assistant Professor (Senior Grade)	Department of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Wanknaghat Solon (H.P.) India	July 2013 Sep 2017
Assistant Professor	Department of Biotechnology GGV-Central University, Bilaspur (C.G.) India	Feb 2012 June 2013
Post-doctoral Research Fellow	School of Medicine Stanford University California, USA	April 2007- April 2012

Teaching: Cell and Molecular Biology, Comparative and Functional Genomics, High Throughput Technologies, Functional Genomics. Genomics & Proteomics

Research Interests: Functional Genomics, and Proteomics

PATENT

1. "Biodegradable Fungal Based Bio-composite Sheet (FBBS) for Sustainable Materials Manufacturing" Manisha Sharma, Jata Shankar, Kannu Priya, Ashok K Nadda Application no. 202411039825 published on 7 June 2024

2. Tanish Mahajan, Hridhima Sen, Vaibhav Sharma, Diksha Hooda, Jata Shankar "AI AND ML-BASED DRIVER BEHAVIOR MONITORING SYSTEM FOR ENHANCED ACCIDENT PREVENTION " Application no. 202411053689 filed on 15 July 2024 published on 26 July 2024

Book

1. Shankar, J., Verma, P., & Shah, M.P. (Eds.). (2024). Microbial Approaches for Sustainable Green Technologies (1st ed.). CRC Press. Boca Raton FL <https://doi.org/10.1201/9781003407683>
ISBN 9781032526485. 356 Pages 49 B/W Illustrations

Research Grants/International fellowship/other: 05

1. Morphological and transcripts evaluation from germinating stages of *Aspergillus flavus* 6 lakhs (Sanctioned, UGC No. F. 20-26 (3)/2012 (BSR))
2. Studies on the diversity of entomopathogenic fungi of Chhattisgarh: Understanding the molecular mechanism of entomopathogenesis for bioprospecting 33 lakhs (Co PI) DBT No. BT/PR4484/AGR/5/570/2012
3. DBT-Boost to GuruGhasidas Viwavidyalaya Interdisciplinary Life Science Department for Education and Research 3.69Crore (Sanctioned during GGV tenure) DBT/No.BT/PR 7020/INF/22/172/2012 Group member (Microbiology group).
4. Post-doctoral fellowship (2010-2012) from National Institute of Allergy and Infectious Diseases and National Institutes of Health (URL: nih.gov) Grant 1R21AI85566-01 to DAS.
5. DST-SERB; SSY/2023/000424 Sanctioned Amount-1 lakh 25 may 2023 for International Conference in Biotechnology and Bioinformatics 13-15 July 2023 (Convener)

Research guidance

Ph.D. – (02 currently enrolled, 05 completed); B. Tech / B.Sc. (19/04) – completed; M. Tech/M.Sc. (14)-completed.

Awards and Fellowships

1. All India Entrance Examination Test for M. Sc. Biotechnology (1999), conducted by Jawaharlal Nehru University (JNU), New Delhi.
2. 1999-2001 Awarded Post-Graduate scholarship during M. Sc. Biotechnology by Department of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India, India.
3. National Eligibility Test (NET) conducted by Council of Scientific & Industrial Research (CSIR), (2000, 2001).
4. 2004-2006 Awarded CSIR Senior Research Fellow,
5. Awarded travel grant from TIGR, CSIR, DST and INSA to present poster at 7th Annual Conference on Computational Genomics” Reston, Virginia, USA, organized by The Institute of Genomic Research (TIGR), October 21-24, 2004.
6. Full scholarship from 2nd Advances Against Aspergillosis (AAA2006), 22- 25 Feb 2006, Athens, Greece.
7. ‘BEST Poster Award’, Tarun Kumar Patel, Rajesh Anand, Bhupendra N Tiwary, Jata Shankar*. Detection of Aflatoxin production in *Aspergillus flavus* strains through triple quadrupole mass spectroscopy. National Conference on Microbial Diversity: Exploration, Conservation & Application" on Feb., 16th & 17th, 2013, Bilaspur (C.G.), India. (Poster), *Corresponding author)
8. ‘Scholarship Award 7nd Advances Against Aspergillosis (AAA2016), 3rd-5th March 2016, Manchester, United Kingdom.
9. **Travel Grant from DST for Jata Shankar**, Raman Thakur, Shanu Hoda, Shraddha Tiwari, Pooja Vijayaraghavan. Proteome profile provided molecular insight into germination of *Aspergilli* and biosynthesis of secondary metabolites. 5th International Congress on Analytical Proteomics (V ICAP 2017). 3 rd – 6 th July 2017 | Caparica | Portugal (Oral Invitation)

Membership of Professional Bodies: The American Academy of Allergy, Asthma & Immunology (AAAAI), International Society for Human and Animal Mycology (ISHAM) Life member; Indian Immunology Society (LM/IIS/530/12/16) Life Member; Mycological Society of India (LM-21-16)

Ad Hoc Reviewer for Journals No =40

Contributions to NCBI GenBank database (Total = 1000) Accession No: Isocitrate lyase (AY523574) Nucleoside diphosphate Kinase (AY324230) Malate synthase (AY289197) Heat shock protein (AY551909) Thiamine biosynthesis , Protein (AY792973) Guanylate kinase AY523574 Polyubiquitin (AY817687) Tetratricopeptide (AY881620), Accession numbers (EST)# BM005702, BM032616, BM037654 BQ079382, BQ276244, BM378043- BM378045, BM500121- BM500124

CB331855-CB331862, CB351755-CB351763, CF413594-CF413613 CN373616-CN373643, CN779603-CN779615, CO132900-CO132914 DN626033-DN626085 No.= 153

Gene bank accession for GSS from F1778766-F1779357 (Total number of sequences = 591

Gene bank accession for GSS from JM175074-JM175450 (Total number of sequences =376

SRA-NCBI) under the following accession identifiers: SRX1201397, SRX1201396, SRX1201395, SRX1201394, SRX1201392 (456 million reads).

Pride database (PXD01679): >2000 peptide sequence for *Aspergillus terreus*

FDP/ Workshop/Expert Lecture=17

Published Article

1. Shankar, Jata, Raman Thakur, Karl V. Clemons, and David A. Stevens. 2024. "Interplay of Cytokines and Chemokines in Aspergillosis" *Journal of Fungi* 10, no. 4: 251. <https://doi.org/10.3390/jof10040251> IF-5 EISSN 2309-608X IF-4.5
2. Sen, P., Vijay, M., Kamboj, H., Gupta, L., Shankar, J. and Vijayaraghavan, P., 2024. cyp51A mutations, protein modeling, and efflux pump gene expression reveals multifactorial complexity towards understanding *Aspergillus* section Nigri azole resistance mechanism. *Scientific Reports*, 14(1), p.6156. IF-4.5 <https://doi.org/10.1038/s41598-024-55237-9> ISSN 2045-2322 (online)
3. Tulika Srivastava, Divya Tyagi, Siraj Fatima, Sathyan, M.T. Vishnu; Ritu Raj, Aniket Sharma, Minal Chaturvedi, Meetali, Sinha, Sonia Shishodia, Dinesh Kumar; Sandeep Sharma, **Jata Shankar**, Aruna Satish,; Smriti Priya. 2024. A natural compound mediated alpha-synuclein aggregation inhibition leads to neuroprotection in *Caenorhabditis elegans* models. *Journal of Neurochemistry*. 168 (8) 1640-1654 <https://doi.org/10.1111/jnc.15907> [IF (2021): 5.5 Print ISSN 0022-3042 IF-4
4. Thakur, R., Shishodia, S. K., Sharma, A., Chauhan, A., Kaur, S., & Shankar, J. (2024). Accelerating the understanding of *Aspergillus terreus*: Epidemiology, physiology, immunology and advances. *Current Research in Microbial Sciences*, 6, 100220. Scopus/SCIE IF-4.5 ISSN: 2666-5174 <https://doi.org/10.1016/j.crmicr.2024.100220>
5. Sharma A, Thakur R, Mittal S, Shankar J. Identification of High-Risk Single Nucleotide Polymorphisms (SNPs) of Epidermal Growth Factor Receptor (EGFR) and Their Interaction with Various TKI Drugs. *Eurasian Journal of Medicine and Oncology*. 2023; 7(4): 334-344 IF-2.5 P-ISSN 2587-2400
6. Rani, M., Mondal, S.M., Kundu, P., Thakur, A., Chaudhary, A., Vashist, J. and Shankar, J., 2023. Edible mushroom: occurrence, management and health benefits. *Food Materials Research*, 3:21. e-ISSN: 2771-4683 Scopus
7. Pooja Sen, Lovely Gupta, Mukund Vijay, Maansi Vermani Sarin, **Jata Shankar**, Saif Hameed and Pooja Vijayaraghavan. (2023) 4-Allyl-2-methoxyphenol Modulates the Expression of Genes Involved in Efflux Pump, Biofilm Formation and Sterol Biosynthesis in Azole Resistant *Aspergillus fumigatus*. *Front. Cell. Infect. Microbiol.* 13: 1103957 - | <https://doi.org/10.3389/fcimb.2023.1103957> Scopus, SCI IF-5
8. Chhavi, Thakur, Amanjot Singh Malhotra, & **Jata Shankar**. Integrated Bioinformatics Analysis to Study Gallic Acid-Mediated Inhibition of Polyketide Synthase A from Aflatoxin Biosynthesis Pathway of *Aspergillus flavus*. *Chemistry Africa* (2023). <https://doi.org/10.1007/s42250-023-00589-4> (Scopus, ESCI) IF-1.2 P-2522-5758
9. **Jata Shankar**. Insight into the metabolic changes during germination of *Aspergillus niger* conidia using nLC-qTOF. *Biologia* (2022, 77, 2701-2714. <https://doi.org/10.1007/s11756-022-01115-6> IF-1.5 SCI and Scopus 0006-3088 -P
10. **Jata Shankar** (2021) Food Habit Associated Mycobiota Composition and Their Impact on Human Health. *Front. Nutr.* 8:773577. doi: 10.3389/fnut.2021.773577 IF-5.5 SCI and Scopus **2296861X**
11. Sonia Kumari Shishodia and Jata Shankar*, "Exploration of mycelial proteins from *Aspergillus terreus* revealed ribosome biogenesis and antioxidant enzymes", *Current Proteomics* (2020) 17: 5. Pp433-445. IF 0.8 (cite score-1.2) <https://doi.org/10.2174/1570164617666191004163734>
12. Agrawal K, **Shankar J**, Kumar R, Verma P. Insight into multicopper oxidase laccase from *Myrothecium verrucaria* ITCC-8447: a case study using in silico and experimental analysis. *J Environ Sci Health B*. 2020;1-13. IF-2.5 doi:10.1080/03601234.2020.1812334

13. Agrawal, K., **Shankar, J.** & Verma, P. Multicopper oxidase (MCO) laccase from *Stropharia* sp. ITCC-8422: an apparent authentication using integrated experimental and in silico analysis. *3 Biotech* **10**, 413 (2020).IF-3 <https://doi.org/10.1007/s13205-020-02399-8>
14. S.K Shishodia, **J. Shankar.** “Proteomic analysis revealed ROS-mediated growth inhibition of *Aspergillus terreus* by shikonin”. *Journal of Proteomics*, vol 224 (103849), pp1-12, 2020 IF 4 (cite score 6.7)
15. Manali Gangwar & **Jata Shankar.** (2020). Molecular mechanisms of floral biology of *Jatropha curcas*: opportunities and challenges as an energy crop. *Frontiers in Plant Science*, *11*, 609. doi: 10.3389/fpls.2020.00609 IF:5.7
16. Hoda, Shanu, Lovely Gupta, **Jata Shankar**, Alok Kumar Gupta, and Pooja Vijayaraghavan. (2020). cis-9-Hexadecenal, a Natural Compound Targeting Cell Wall Organization, Critical Growth Factor, and Virulence of *Aspergillus fumigatus*. *ACS omega*. *5* (17) pp. 10077-10088, **2020** . <https://doi.org/10.1021/acsomega.0c00615> IF: 3.7
17. Anti-melanogenic activity of *Myristica fragrans* extract against *Aspergillus fumigatus* using phenotype based screening. Shanu Hoda, Maansi Vermani, Rajesh. K. Joshi, Jata Shankar and Pooja Vijayaraghavan. **BMC Alternative and complementary medicine**. **20**:67 (2020) <https://doi.org/10.1186/s12906-020-2859-z> IF: 2.7 ISSN: 2662-7671
18. Sonia K. Shishodia, Shraddha Tiwari, Shanu Hoda, Pooja Vijayaraghavan & Jata Shankar* (2020) SEM and qRT-PCR revealed quercetin inhibits morphogenesis of *Aspergillus flavus* conidia via modulating calcineurin-Crz1 signalling pathway, **Mycology**, DOI: [10.1080/21501203.2020.1711826](https://doi.org/10.1080/21501203.2020.1711826) Print ISSN: 2150-1203 Online ISSN: 2150-1211(UGC list no. 37157) Scopus cite score: 2.3
19. Shraddha Tiwari, Sonia Kumari Shishodia, Jata Shankar. (2019) Docking analysis of hexanoic acid and quercetin with seven domains of polyketide synthase A provided insight into quercetin-mediated aflatoxin biosynthesis inhibition in *Aspergillus flavus* **3Biotech** 9(4):149 <https://doi.org/10.1007/s13205-019-1675-y> [IF-2] Print ISSN 2190572X (99), Online ISSN 21905738
20. Sonia Kumari Shishodia, Shraddha Tiwari, Jata Shankar. (2019). Resistance mechanism and proteins in *Aspergillus* species against antifungal agents. *Mycology*. <https://doi.org/10.1080/21501203.2019.1574927>. Print ISSN: 2150-1203 Online ISSN: 2150-1211(UGC list no. 37157) Scopus cite score: 2.3
21. Raman Thakur and Jata Shankar*. (2018). Proteome analysis revealed Jak/Stat signaling and cytoskeleton rearrangement proteins in human lung epithelial cells during interaction with *Aspergillus terreus*. **Current Signal Transduction Therapy**. Vol 13 (1) doi : 10.2174/1574362413666180529123513 ISSN: 1574-3624 (UGC list no. 14407)cite score-1.7
22. Jata Shankar*, Shraddha Tiwari, Sonia K. Shishodia, Manali Gangwar, Shanu Hoda, Raman Thakur and Pooja Vijayaraghavan (2018) Molecular Insights Into Development and Virulence Determinants of Aspergilli: A Proteomic Perspective. **Frontiers in Cellular and Infection Microbiology**. 8:180.doi: 10.3389/fcimb.2018.00180 [IF : 5.2] ISSN: 2235-2988 (UGC list no 17720)
23. Jata Shankar , Gustavo C. Cerqueira, Jennifer R. Wortman, Karl V. Clemons, David A. Stevens. (2018) RNA-Seq Profile reveals Th-1 and Th-17 Type of Immune Responses in Mice Infected Systemically with *Aspergillus fumigatus*. **Mycopathologia**. <https://doi.org/10.1007/s11046-018-0254-9> [IF (2.4) . ISSN: 0301-486X (P) (37158)1573-0832 (E)
24. Shraddha Tiwari and Jata Shankar*. (2018) Integrated proteome and HPLC analysis revealed quercetin-mediated inhibition of aflatoxin B1 biosynthesis in *Aspergillus flavus*. *3Biotech* 8: 47. <https://doi.org/10.1007/s13205-017-1067-0> [IF-1.3] Print ISSN 2190-572X, Online ISSN 2190-5738
25. Raman Thakur and Jata Shankar*. (2018) Comprehensive in-silico Analysis of High-risk Non-synonymous SNPs in Dectin-1 Gene of Human and their Impact on Protein Structure. *Current Pharmacogenomics and Personalized Medicine* 15: 2. doi: [10.2174/1875692116666180115142706](https://doi.org/10.2174/1875692116666180115142706)
26. Jata Shankar [¶], Gustavo C. Cerqueira [¶], Jennifer R. Wortman, Karl V. Clemons, David A. Stevens. (2018) RNA-Seq Profile of Kidneys of Mice Infected Systemically with *Aspergillus fumigatus*
27. Raman Thakur and Jata Shankar. (2017) Proteome profile of *Aspergillus terreus* conidia at germinating stage; Identification of probable virulent factors and enzymes from mycotoxin pathways. doi:10.1007/s11046-017-0161-5 [IF (2016) : 1.7] .
28. Shraddha Tiwari, Nupur Gupta, Udayabanu M, Jata Shankar*. (2017) Anti-aspergillus properties of phytochemicals against aflatoxin producing *Aspergillus flavus* and *Aspergillus parasiticus* National Academy science letter [IF(2016) : 0.36] DOI 10.1007/s40009-017-0569-y
29. Raman Thakur and Jata Shankar*. (2017). New treatment regime for *Aspergillus* mediated infections. *Virology & Mycology Virol-mycol* 6: 162. doi:10.4172/2161-0517.1000163 [IF(2015) : 0.73] . Journal ISSN: ISSN: 2161-0517
30. Shraddha Tiwari, Raman Thakur, Gunjan Goel, Jata Shankar.* (2016) Nano-LC-Q-TOF Analysis of Proteome Revealed Germination of *Aspergillus flavus* Conidia is Accompanied by MAPK Signalling and Cell Wall Modulation. *Mycopathologia*, 181:769–786. doi:10.1007/s11046-016-0056-x. [IF(2015) : 1.7] .
31. Raman Thakur and Jata Shankar*. (2016) In silico Analysis Revealed High-risk Single Nucleotide Polymorphisms in Human Pentraxin-3 Gene and their Impact on Innate Immune Response against Microbial Pathogens. *Frontiers in Microbiology*, 7 (192). [IF: 5.6] . Journal ISSN: 1664-302X

32. Shraddha Tiwari, Raman Thakur, Jata Shankar.* (2015). Role of Heat-Shock Proteins in Cellular Function and in the Biology of Fungi. *Biotechnology Research International* 2015, Articles ID 132635, 11 pages. Impact factor awaited. ISSN: 2090-3138 (Print) ISSN: 2090-3146 (Online)
33. Thakur Raman and Shankar Jata. *In silico* Identification of Potential Peptides or Allergen Shot Candidates Against *Aspergillus fumigatus* BioResearch Open Access. November 2016, 5(1): 330-341. doi:10.1089/biores.2016.0035. Online ISSN: 2164-7860
34. Raman Thakur, Shraddha Tiwari, Jata Shankar*. (2016) Differential Expression Pattern of Heat Shock Protein Genes in Toxigenic and Atoxigenic Isolate of *Aspergillus flavus*. *British Microbiology Research Journal* 14(2) [IF(2015) : Awaiting] . Journal ISSN: 2231-0886.
35. Raman Thakur, Rajesh Anand, Shraddha Tiwari, Agam P. Singh, Bhupendra N. Tiwary, Jata Shankar* (2015). Cytokines induce effector T-helper cells during invasive aspergillosis; what we have learned about T-helper cells?. *Frontiers in Microbiology*, 6 (429).[IF : 5.6] . Journal ISSN: 1664-302X
36. Karl V. Clemons, Jata Shankar, David A. Stevens. 2016. Mycologic Endocrinology. *Advances in Experimental Medicine and Biology* 874, 337-363 [IF (2015): 2.2] Journal ISSN: 0065-2598
37. Rajesh Anand, Jata Shankar, Bhupendra Nath Tiwary, Agam Prasad Singh. (2015). *Aspergillus flavus* induces granulomatous cerebral aspergillosis in mice with display of distinct cytokine profile. *Cytokine*, 72 (2), 166-172. [IF:4] . Journal ISSN: 1043-4666 (Print), 1096-0023 (Electronic)
38. Tarun Kumar Patel, Rajesh Anand, Agam Prasad Singh, Jata Shankar*, Bhupendra N. Tiwary (2014). Evaluation of aflatoxin B1 biosynthesis in *A. flavus* isolates from central india and identification of atoxigenic isolates. *Biotechnology and Bioprocess Engineering*, 19 (6), 1105-1113. [IF(2015):1.22
39. Jata Shankar. An overview of toxins in *Aspergillus* associated with pathogenesis. *International Journal of Life Sciences Biotechnology and Pharma Research*. 2013 2 (2) : 16-31. [Impact factor awaited] ISSN: 2250-3137
40. Rajesh Anand, Jata Shankar, Agam P. Singh and Bhupendra N. Tiwary. Cytokine milieu in renal cavities of immunocompetent mice in response to intravenous challenge of *Aspergillus flavus* leading to aspergillosis. *Cytokine*. 2013 61 (1) : 63–70. [IF(2015) : 2.9] .
41. Jata Shankar, Thomas D. Wu, Karl V. Clemons, Jomar P. Monteiro, Laurence F. Mirels, and David A. Stevens. Influence of 17 β -estradiol on gene expression of *Paracoccidioides* during mycelia to yeast transition. *PLoS ONE*. 2011 6 (12): e28402. [IF (2015) : 3] Journal ISSN: 1932-6203
42. Jata Shankar, Angela Restrepo, Karl V. Clemons and David A. Stevens. Hormones and the Resistance of Women to Paracoccidioidomycosis. *Clinical Microbiology Reviews*. 2011 24 (2) : 296-313.[IF: 20] Journal ISSN: 0893-8512 (Print), 1098-6618 (Electronic). Cite Score : 40
43. Jomar Patricio Monteiro, Karl V Clemons, Laurence F Mirels, John A Coller Jr, Thomas D Wu, Jata Shankar, Catalina R Lopes, David A Stevens. Genomic DNA microarray comparison of gene expression patterns in *Paracoccidioides brasiliensis* mycelia and yeasts in vitro. *Microbiology*. 2009 Aug; 155 (Pt 8):2795-808.[IF (2015) : 2.2] Journal ISSN: 1350-0872 (Print), 1465-2080 (Electronic).
44. Santosh Kumar Upadhyay, Jata Shankar, Yogendra Singh, Seemi Farhat Basir, Taruna Madan, P Usha Sarma. Expressed sequence tags of *Aspergillus fumigatus*: Extension of catalogue and their evaluation as putative drug targets and/or diagnostic markers. *Indian Journal of Clinical Biochemistry*. 2009, 24 (2): 131-136. [IF (2015) : 0.9] Journal ISSN: : 0970-1915 (Print), 0974-0422 (Electronic)
45. Preeti J Bhetariya, Jata Shankar, Yogendra Singh, Taruna Madan, Anupam Varma, Seemi Farhat Basir, P Usha Sarma. Multiplex PCR for Detection of *Aspergillus fumigatus*, *Aspergillus flavus* and *Aspergillus niger*. *The Journal of Allergy and Clinical Immunology*. 2009 123(2) : S160/Abstract (Impact factor: 11).[IF (2015) : 12.4] Journal ISSN: 0091-6749 (Print), 1097-6825 (Electronic).
46. Poonam Gautam*, Jata Shankar*, Taruna Madan, Ravi Sirdeshmukh, Curam Sreenivasacharlu Sundaram, Wasudev Namdeo Gade, Seemi Farhat Basir, Puranam Usha Sarma. Proteomic and transcriptomic analysis of *Aspergillus fumigatus* on exposure to amphotericin B. *Antimicrob Agents Chemother*. 2008 52(12) : 4220-4227. (Poonam Gautam and Jata Shankar[#], are jointly first author).[IF: 5] Journal ISSN: 0066-4804 (print) 1098-6596 (Cite Score:8)
47. Jata Shankar, Santosh Kumar Upadhyay, Saurabh Gupta, Seemi Farhat Basir, P Usha Sarma, Taruna Madan. Global Expression Profile of *Aspergillus fumigatus* Conidia during Interaction with Murine Macrophage. *The Journal of Allergy and Clinical Immunology*. 2008 121(2) : S134/Abstract. [IF (2015) : 12.4]
48. Jata Shankar, Taruna Madan, Seemi Farhat Basir, P. Usha Sarma. 'Identification and characterization of Polyubiquitin gene from cDNA library of *Aspergillus fumigatus*' *Indian Journal of Clinical Biochemistry*, 2005 20 (1): 208-212. [IF (2015) : 0.9]
49. Jata Shankar, Shailly Nigam, Shweta Saxena, Taruna Madan, P. Usha Sarma. Identification and Assignment of Function to the Genes of *Aspergillus fumigatus* Expressed at 37°C. *Journal of Eukaryotic Microbiology*. 2004 (4) 428-432 [IF (2015) : 2.7] Journal ISSN:1066-5234 (Print), 1550-7408

Book chapters

50. Karl V. Clemons, Jata Shankar and David A. Stevens. Mycologic endocrinology. 2010 p. 269-290. In P. P. E. Freestone, M. Lyte (eds.), *Microbial endocrinology: interkingdom signaling in infectious diseases and health*. Springer-Verlag New York. Hardcover ISBN, eBook ISBN 978-1-4419-5576-0.
51. Thakur R and Shankar J. Strategies for gene expression in Prokaryotic and Eukaryotic system. V.C. Kalia, A.K. Saini (eds.), *Metabolic Engineering for Bioactive Compounds*, DOI 10.1007/978-981-10-5511-9_11 Springer (2017).
52. Ankit Srivastava, Saurabh Bansal and Jata Shankar. Developments and diversity of proteins and enzymes. V.C. Kalia, A.K. Saini (eds.), *Metabolic Engineering for Bioactive Compounds*, DOI 10.1007/978-981-10-5511-9_2 Springer (2017).
53. Shraddha Tiwari and Jata Shankar*. (2018) Hsp70 in Fungi: Evolution, Function and Vaccine Candidate. A. A. A. Asea, P. Kaur (eds.), *HSP70 in Human Diseases and Disorders*, Heat Shock Proteins 14, https://doi.org/10.1007/978-3-319-89551-2_20 (ISBN: 9783319895505) Springer International Publishing AG
54. Aanchal Bansal, Megha Sharma, Aakanksha Pandey, Jata Shankar. 2023. Aflatoxins: Occurrence, Biosynthetic Pathway, Management and Impact on Health. I. Singh et al. (eds.), *Fungal Resources for Sustainable Economy*, https://doi.org/10.1007/978-981-19-9103-5_21 pp565-596 ISBN 978-981-19-9102-8 Springer Nature Singapore Pte Ltd. 2023
55. Chhavi Thakur and Jata Shankar. 2022. Bioinformatics Integration to Biomass Waste Biodegradation and valorization. (Ed) Next-Gen Technological Advances for Sustainable Development of Enzyme based Biorefinery edition-1 <https://doi.org/10.1201/9781003187721-8> ISBN 9781032035208 (CRC Press, Boca Raton) PP177-204
56. Sonia Kumari Shishodia, Raman Thakur, Priya Gautam, Saurav, Neha, and Jata Shankar. Drug-Resistance Patterns in Opportunistic *Aspergilli*: A Molecular Perspective S. Hameed, P. Vijayaraghavan (eds.), *Recent Advances in Human Fungal Diseases*, https://doi.org/10.1007/978-981-97-4909-6_17 Springer Nature Singapore Pte 2024 ISBN 9819749085

Conferences/Abstracts (Total =27)

Workshop organised

1. Five days Hands-on Workshop on “Next Generation Sequencing Data Analysis” from 20-24 March, 2023 at Jaypee University Of Information Technology, Wagnaghat H.P

Conference organized

1. International Conference in Biotechnology and Bioinformatics 13-15 July 2023 2023 at Jaypee University Of Information Technology, Wagnaghat H.P