Kusuma Sai Davuluri, Ph.D

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LINKS

Research Gate, LinkedIn

PROFILE

Scientist looking for an opportunity to work and to improve myself by contributing my strengths and skills in project that offers challenging assignments

EMPLOYMENT HISTORY

Sep 2023 — Present

Post doctoral Researcher, Institute of Molecular and Translational Medicine

Olomouc

Evaluation of the anti-tubercular potential of various compounds and uncovering their mechanisms of action against *Mycobacterium tuberculosis.*

May 2022 — Sep 2023

Research Scientist, ICMR-National Institute of Virology

Pune

Scaling of facilities for production of diagnostic kits/reagent for detection of Japanese Encephalitis, Dengue and Chikungunya virus. Invitro and invivo studies on anti-virals against DENV and CHIKV.

Sep 2018 — May 2022

Doctoral Researcher, ICMR-National JALMA Institute for Leprosy and Other mycobacterial diseases

Agra

Trained on culturing of M.tb both in liquid as well as solid media, Stock and lysate preparation of M.tb and CFU determination, Genomic studies, Molecular studies, Immunological studies and electroporation of M.tb cells. Invitro and invivo studies research focus on host directed therapy for M.tb infection.

Nov 2016 — Sep 2018

Scientific Analyst, Molecular Connections

Bangalore

Accurately input, update, and manage article information, ensuring that databases are comprehensive.

Content writer, Evelyn Learning

EDUCATION

Jun 2014 — Apr 2016

M.Sc Biotechnology, Sri Padmavati Women's University

Tirupati

Gold Medalist CPGA: 7.5

Jun 2011 — Apr 2014

B.Sc in Biotechnology, Biochemistry, and Chemistry, Acharya Nagarjuna University

Guntūr

CPGA: 9.0

Jun 2008 — Mar 2010

Intermediate, Sri Chaitanya College

Tenali

CPGA: 9.21

Jun 2007 — Mar 2008

Secondary Education, SSC

Tenali

CPGA: 8.5

SKILLS

Next Generation Sequencing	Expert	Drug Discovery and Histopathology.	Expert
LC-MS	Expert	Invivo experimentation	Expert
Flow cytometry	Expert	Microbiology & Molecular techniques	Expert

INTERNSHIPS

Apr 2016 — Jun 2016

Intern, Biozone Technologies

Chennai

Academic and industrial training: Molecular diagnostics

CONFERENCE

2013

Conference on Learner Centered Learning and Involvement of Students in Quality Assurance.

Importance of information and communication technology in centered learning information and communication technology.

2011

National Conference on Bio-Organic Chemistry

Importance of metals in living organisms.

Oct 2021

13th Annual Meeting of Proteomics society, India International virtual symposium on "OMICS in redefining Modern Biology", CSIR-CCMB.

Hyderabad

Diverse effects of atorvastatin in controlling the dissemination of tuberculosis infection and increasing the drug penetration at granuloma site.

Jul 2021

5-Day Faculty enrichment programme (FEP) on Cutting Edge science in Cellular and Molecular Biomedicine

Feb 2021

International Conference on Biotechnology and Microbiology.

Davuluri KS, Singh SV, Singh AV, Chauhan DS. Miscellaneous paths induced by *Mycobacterium tuberculosis* for its reactivation and dissemination from the freckled site –granuloma. IJSEM Vol 6, Issue 3, March 2021 DOI: 01.1617/vol8/iss3/pid32016

Sep 2020

Competition in Emerging areas of Biotechnology jointly organized by KITS, ABLE & Biotecnika info Labs Pvt.Ltd.

Role of Chemokines and Chemokine receptors in the dissemination of Mycobacterium tuberculosis infection.

PUBLICATIONS

2016

Sai, D.K & Kokkanti, Rekha & Usha, Rayalacheruvu. (2016). Assessment of genetic diversity in Groundnut (Arachis hypogaea L.) genotypes using PCR based molecular markers. 2. 142- 147.

2021

Singh AV, Singh S, Yadav A, Kushwah S, Yadav R, Sai DK, Chauhan DS. Genetic variability in multidrug-resistant Mycobacterium tuberculosis isolates from patients with pulmonary tuberculosis in North India. BMC Microbiol. 2021 Apr 21;21(1):123. doi: 10.1186/s12866-021- 02174-6. PMID: 33879047; PMCID: PMC8059304.

2021

Anjali Yadav, Ajay Vir Singh, Shweta Kushwah, Rajbala Yadav, Davuluri Kusuma Sai, Rakesh Kumar Sharma and Devendra Singh Chauhan, Occurrence, distribution and biodiversity of nontuberculous mycobacteria in drinking water systems in Uttar Pradesh, north India. Vol. 13, Issue, 12, pp.20063-20066, December, 2021 DOI: https://doi.org/10.24941/ijcr.41711.12.2021.

2022

Davuluri KS, Singh AK, Kumar V, Singh SV, Singh AV, Kumar S, Yadav R, Kushwaha S, Chauhan DS. Stimulated expression of ELR+ chemokines, VEGFA and TNF-AIP3 promote mycobacterial dissemination in extrapulmonary tuberculosis patients and Cavia porcellus model of tuberculosis. Tuberculosis (Edinb). 2022 Jul;135:102224. doi: 10.1016/j.tube.2022.102224. Epub 2022 Jun 22. PMID: 35763913.

2022

Davuluri KS, Chauhan DS. microRNAs associated with the pathogenesis and their role in regulating various

signaling pathways during Mycobacterium tuberculosis infection. Front Cell Infect Microbiol. 2022 Oct 27;12:1009901. doi: 10.3389/fcimb.2022.1009901. PMID: 36389170; PMCID: PMC9647626.

2023

Davuluri KS, Singh AK, Singh AV, Chaudhary P, Raman SK, Kushwaha S, Singh SV, Chauhan DS. Atorvastatin Potentially Reduces Mycobacterial Severity through Its Action on Lipoarabinomannan and Drug Permeability in Granulomas. Microbiol Spectr. 2023 Jan 31;11(2):e0319722. doi: 10.1128/spectrum.03197-22. Epub ahead of print. PMID: 36719189; PMCID: PMC10100658.

2023 Alagarasu K, Punekar M, Patil P, Kasabe B, Kakade M, Davuluri KS, Cherian S, Parashar D. Effect of carpaine, a major alkaloid from Carica papaya leaves, on dengue virus-2 infection and replication-an in-vitro and in-silico study. Phytother Res. 2023 Aug;37(8):3191-3194. doi: 10.1002/ptr.7715. Epub 2023 Jan 1. PMID: 36587936.

2023 Kasabe B, Ahire G, Patil P, Punekar M, Davuluri KS, Kakade M, Alagarasu K, Parashar D, Cherian S. Drug repurposing approach against chikungunya virus: an in vitro and in silico study. Front Cell Infect Microbiol. 2023 Apr 27;13:1132538. doi: 10.3389/fcimb.2023.1132538. Erratum in: Front Cell Infect Microbiol. 2023 Jun 23;13:1226054. PMID: 37180434; PMCID: PMC10174255.

2023 Davuluri KS, Singh SV, Chauhan DS. Bacterial dissemination in Mycobacterium tuberculosis by CD+ T-cells & proinflammatory cytokines. Indian J Med Res. 2023 Jan;158(1):40-46. doi: 10.4103/ijmr.ijmr_2143_21. PMID: 37602585; PMCID: PMC10550058.

2023 Davuluri KS, Singh AK, Singh AV, Kumar V, Singh SV and Chauhan DS: Anti-CXCR4 chemokine receptor, motixafortide, as an adjunct treatment with anti-TB drugs decreases the bacterial burden by improving drug distribution. World Acad Sci J 5: 13, 2023

2023 Kushwaha Shweta, Yadav Rajbala, Davuluri Sai Kusuma, Goel Anjana, Chauhan Devendra Singh and Vir Singh Ajay*, Higher Abundance of Vitronectin (S-protein) in Serum-derived Exosomes of Pulmonary and Extra-Pulmonary Tuberculosis Patients as Compared to HIV-Tuberculosis Dual-infected Patients and Healthy Humans, Current Proteomics 2023; 20(1) . https://dx.doi.org/10.2174/1570164620666230508140912

REFERENCES

Devendra Singh Chauhan from ICMR-National JALMA Institute for Leprosy and Other mycobacterial diseases

devchauhan01@yahoo.co.in · +91 9219610676

Anuradha Tripathy from ICMR-National Institute of Virology

anuradhastripathy@hotmail.com · +91 9822914708

Prof. Shoor Vir Singh from GLA University

shoorvir_singh@rediffmail.com · +91 9719072856