

SHASHIDHAR JAGGAIHGARI, PH.D.

Scientist, In-charge GMP Labs
Asian Healthcare Foundation
AIG Hospitals, Hyderabad
India

sjaggaihgari@hotmail.com
Mobile: +91-8686708841

Brief Overview

- ↔ 22 + years of Progressive experience in R & D (PhD, Research Associate and Post Doctoral Associate, Product Specialist, Operations, Scientist).
 - ↔ 10+ years of experience in Product Specialist, Clinical Operations
 - ↔ 13+ years of experience in Stem cell Laboratory
-

- Presently working as Research Scientist, GMP Lab In-charge, (Quality Assurance, Processing) with Asian Healthcare Foundation, AIG Hospitals, Hyderabad since August 2017.

Previous job experience:

- Worked as Director, Product Specialist and Clinical Operations, Cytocare Technologies Private Limited, Hyderabad (Sep 2012 – June 2017).
 - Provided regenerative cellular therapies using point of care technology support devices for Mobilized stem cells, Bone marrow stem cells and Platelet rich plasma for various clinical conditions.
- Previously worked as Laboratory In-charge, Cord Blood Bank and stem cell lab, Max Research Center, Max Hospital, Gurgaon, Haryana (June 2011 – July 2012).
 - Established GMP lab (Class 10,000) for Stem cell processing from Cord Blood, Cord Blood tissue and Bone marrow according to the Drug Controller General of India (DCGI) guidelines.
- Worked as a lecturer in Biochemistry and Microbiology for postgraduates and Undergraduates for 4 years: 1999-2003.

RESPONSIBILITIES

- Providing training and services for Bone Marrow Stem cells, Adipose tissue processing and Platelet Rich Plasma Preparation with approved technologies and design of the protocols and execute for critical transfusion medicine cases.
- Expert in setting up the Professional Blood banks, cord blood banks and transplantation units with cGMP and GLP regulations and designing the laboratories for clinical research.
- Collaborating with the clinicians to discuss and promote Transfusion Medicine, Regenerative medicine and cellular therapy for various clinical conditions and supporting products.
- Established cGMP lab (Class 10,000) for Stem cell processing from Cord Blood, Cord Blood tissue and Bone marrow according to the Drug Controller General of India (DCGI) guidelines.
- Designed Protocols for cord blood processing using AXP (Thermogenesis)

device and cryo preservation using Bioarchive system were standardized and applied license from DCGI for Cord Blood banking.

- Hematopoietic stem cells isolation and expansion from Cord tissue (Wharton's jelly) and Bone Marrow processing.
- Supervision of Laboratory technicians and junior scientists.
- Assisting in overall supervision of the laboratory activities
- Maintain the clinical & lab records and Coordinate procurement of all scientific equipment, laboratory reagents and etc.

Research Experience

- **Post-Doctoral Associate** (2008 – 2011) at Diabetes Research Institute, University of Miami with Dr Rajendra Pahwa, Medical Director, Human cGMP cell processing Facility in the following projects.
 - a. Autologous natural T regulatory (nTreg) cell therapy for tolerance induction in islet transplantation and solid organ transplantation.
 - b. Cord Blood banking, Bonemarrow processing, CD34 isolation by clinimacs
 - c. Flow cytometry using 13 color flurochromes.
 - d. Immune monitoring for clinical trials.
 - e. Standardized various flowcytometry staining flurochrome panels for Tregulatory cells and T follicular cells to study the phenotype, maturation and functional characterization.
 - f. Bone marrow processing and isolation of stem cells manual method and by CD34 Clinimacs method.
 - g. Worked on Cord blood processing by AXP AutoXpress to store cord blood cells in Cord blood banking facility. Thermogenesis trained on AXP system operation and Bioarchive system operation, Cord Blood processing and preservation.
- **Post-Doctoral Fellow (ICMR Research Associate)** at National Institute of Nutrition, Hyderabad for two years (July 2006- March 2008) of Department of Biotechnology (Gov of India) Postdoctoral fellowship with Dr. Vijaya Lakshmi. V, Deputy Director, Stem cell Division, National Institute of Nutrition, ICMR, Hyderabad, India
 - Worked on the project entitled “Pancreatic progenitor cells and effect of nutrients in relation to the proliferation and transdifferentiation to insulin secreting cells *in-vitro*, and *in-vivo* transplantation regulating hyperglycemia in rodent model.”
 - Maintenance of primary culture and cell lines and Characterization of cells in culture by Immunocytochemistry
 - Confocal microscopy of stained cells and tissue sections

ACADEMIC PROFILE

- 2008 – 2011: Post-Doctoral Associate, Diabetes Research Institute, Leonard M. Miller School of Medicine, University of Miami, Miami.
- 2006 – 2008: Department of Biotechnology Postdoctoral Fellow (Government of India), National Institute of Nutrition, Hyderabad.
- 2000 - 2005: PhD in Biochemistry, Osmania University, Hyderabad
Thesis title: “Purification and characterization of mycoferritin from *Aspergillus parasiticus* (255) and its role in aflatoxin biosynthesis.”
- 1997 - 1999: M. Sc. Biochemistry from Madras University.
- 1994 – 1997: B. Sc. from Osmania University (Botany. Zoology& Chemistry)

RESEARCH PAPERS PUBLISHED

- Mitnala Sasikala, **Jaggaihgari Shashidhar**, Gujjarlapudi Deepika, Vishnubhotla Ravikanth, Vemula Venkata Krishna, Yelamanchili Sadhana, Kottapalli Pragathi, Duvvur Nageshwar Reddy. Immunological memory and neutralizing activity to a single dose of COVID-19 vaccine in previously infected individuals. International Journal of Infectious Diseases. Volume 108, July 2021, Pages 183-186.
- Mithun Sharma, Pavan Kumar Pondugala, **Shashidhar Jaggaihgari**, Sasikala Mitnala, Vemula Venkata Krishna, Ganesh Jaishetwar, Pragati Naik, Pramod Kumar, Anand Kulkarni, Rajesh Gupta, Jagdeesh Rampal Singh, Santosh Darisetty, Anuradha Sekharan, Duvvur Nageshwar Reddy, Guduru Venkat Rao, Fatima Syeda, Nitin Jagtap, Padaki Nagaraja Rao. Safety assessment of autologous stem cell combination therapy in patients with decompensated liver cirrhosis: a pilot study. Clinical and Experimental hepatology: <http://doi.org/1016.jceh.2021.03.010>
- Mithun Sharma, Anand Kulkarni, Mitnala Sasikala, Pramod Kumar, **Shashidhar Jaggaihgari**, Kumar Pondugala, Ganesh Jaishetwar, Santosh Darisetty, Nitin Jagtap, Rajesh Gupta, Jagadeesh Rampal Singh, Syeda Fatima, Padaki Nagaraja Rao, Guduru Venkat Rao and Duvvur Nageshwar Reddy. (2020) Long-term Outcome of Autologous Hematopoietic Stem Cell Infusion in Cirrhosis: Waning Effect over Time. Journal of Clinical and Translational Hepatology 2020 vol. 8 | 385–390
- Sojan Abraham, Rajendra Pahwa, Chunting Ye, Savita Pahwa, **Shashidhar Jaggaihgari**, N. Manjunath and Premlata Shankar (2013) In vivo reconstitution of human natural T regulatory cells in NOD/SCID IL2 γ null mice by expression of human IL-2 (P2174). J Immunol May 1, 2013, 190 (1 Supplement) 69.25.
- Sojan Abraham, Rajendra Pahwa, Chunting Ye, Sandesh Subramanya, **Shashidhar Jaggaihgari**, Ashwin Raut, Shuiping Chen, N. Manjunath, Premlata Shankar (2012) Long-term engraftment of human T regulatory cells in NOD/SCID IL2 γ null mice enabled by expression of human IL-2. PLOS 2012, December; 7(12)
- Pahwa R, **Jaggaihgari S**, Pahwa S, Inverardi L, Tzakis A, Ricordi C Isolation and expansion of human natural T regulatory cells for cellular therapy. J Immunol Methods. 2010 Dec 15; 363(1):67-79.

- Prabhakar Reddy P, Lavekar AG, Suresh Babu K, Ranga Rao R, **Shashidhar J**, Shashikiran G, Madhusudana Rao J. (2010) Synthesis, cytotoxic activity and structure-activity relationships of hedychenone analogues. (Bioorganic & Medicinal Chemistry Letters) Apr 15;20(8):2525-8.
- P. Prabhakar Reddy , R. Ranga Rao, **J. Shashidhar**, B. S. Sastry, J. Madhusudana Rao , K. Suresh Babu (2009) Phytochemical investigation of labdane diterpenes from the rhizomes of *Hedychium spicatum* and their cytotoxic activity (Bioorganic & Medicinal Chemistry Letters) 19: 6078–6081.
- P. Prabhakar Reddy, R. Ranga Rao, K. Rekha, K. Suresh Babu, **J. Shashidhar**, G. Shashikiran, V. Vijaya Lakshmi, J. Madhusudana Rao (2009) Two new cytotoxic diterpenes from the rhizomes of *Hedychium spicatum* (Bioorganic & Medicinal Chemistry Letters) 19: 192–195
- **Shashidhar. J**, Sashidhar.R.B and Deshpande.V (2005) “Isolation, purification and characterization of Mycoferritin from *Aspergillus parasiticus*(255).” (FEMS microbiology letters, 245 (2): 287-293.)
- **Shashidhar. J**, sashidhar.R.B and Deshpande.V (2005) “Role of mycoferritin from *Aspergillus parasiticus* (255) in secondary metabolism (aflatoxin production)”. (FEMS microbiology letters, 251(1): 113-117).

PAPERS/ABSTRACTS PRESENTED AT NATIONAL AND INTERNATIONAL CONFERENCES/ SYMPOSIUMS.

- **J.shashidhar***, P.pavan kumar, M. Sasikala, B.papa rao , Shruti bhadra V.v. krishna, CG.prema vani, G. V. Rao, D. Nageshwar reddy. Suitability of bone marrow derived mesenchymal stem cells from old patients expanded in human platelet lysate for clinical applications p.58. International seminar on recent advances in translational medicine (isratm - 2021). School of life sciences, marudupandiyar college, Thanjavur
- P. Pavan kumar,*M. Sasikala, **J. Shashidhar**, V.v. krishna,Ch.prema vani, G. V. Rao, D. Nageshwar reddy. Placental mesenchymal stromal cell-derived secretome confers a better hepatoprotective effect in liver injury models. P.56. International seminar on recent advances in translational medicine (isratm - 2021). School of life sciences, marudupandiyar college, Thanjavur
- Mithun Sharma, Sasikala Mitnala, Padaki N. Rao, Pavan Kumar, **Shashidhar Jaggaiahgari**, Rajesh Gupta, Pramod Da, Annand Kulkarni, Nitin Jagtap, Jagdeesh Rampal Singh, Duvurr N. Reddy, P0613 - Long Term Data on Effect of Mobilized Peripheral Blood Autologous CD34+ Cell Infusion in Patients With Non- Viral Decompensated Cirrhosis. ACG 2019 Annual Scientific Meeting and Postgraduate Course. October 25-30, San Antonio, Texas
- Sojan Abraham, Rajendra Pahwa, Sandesh Subramanya, **Shashidhar Jaggaiahgari**, Ashwin A. Raut, Chunting Ye, Shuiping Chen, Manjunath N & Premlata Shankar. In Vivo Reconstitution Of Human Natural T Regulatory Cells (hu-nTregs) In NOD-scid IL2Rgnull Mice. Keystone conference in Immunoregulatory Networks April 1 - 6, 2011, Colorado, USA.
- Silva SY, Pallikkuth S, Kanthikeel S, **Jaggaiahgari S**, Fischl M, Pahwa R, Pahwa S. HIV+ subjects have a positive correlation between H1N1 antibody titres and

- CXCR5+ CD4 T cells. AIDS Vaccine 2010 September – 1 October Atlanta/Georgia 28. Abst # p17-22.
- S.Y. Silva, M. Fisch, S. Pallikkuth, **S. Jaggaiahgari**, R. Pahwa, S. Pahwa HIV+ subjects on HAART with low CD4 counts have increased frequency of IL- 21 secreting CD4+ T lymphocytes and TFH cells, but absolute numbers are stable. XVIII International AIDS Conference, July 18-23, 2010 Vienna, Austria. Abst # THPE0059.
 - Abdul Qadeer, **Shashidhar J**, Deepa G.L & Deshpande Vijay. (2005) “Isolation, electrophoretic behaviour, aminoacid composition and spectral characteristic of *Clarias batrachus* (walking catfish) liver ferritin”. 74th Annual Meeting SBC (India), Central Drug Research Institute, Lucknow. Nov 7-10.
 - **Shashidhar, J.**, Deshpande, V. & Sasidhar, R. B. Mycoferritins of *Aspergillus* spp. In proceedings of National Symposium on Developments in Microbial Biochemistry and its impact on Biotechnology. (2002) PP: 155-161. (Eds. B.Sasidhar Rao, P.Maruthi Mohan & C.Subramanyam.) Osmania University, Hyderabad, India.
 - **Shashidhar, J.**, Vijay Deshpande & Sashidhar, B. R. (2001) Isolation & Purification of mycoferritin from *Aspergillus parasiticus* (255). 70th Annual Meeting of the Society of Biological Chemists (India), Abst. #P4A18.

CONFERENCES/SYMPOSIUM ATTENDED/ORGANIZED:

- 1 Attended Center For AIDS Research Flow Cytometry Workshop 29th September - 3rd October, 2008 Duke University Medical Center, North Carolina, USA
- 2 Attended "First Annual meeting of Stem Cell Research Forum of India (SCRFI) and International Conference on Stem cell Research. Promises, Advances and Realities" 29th january-1st February, 2007, Bangalore, India
- 3 Worked as an active member in organizing various conferences / meetings / symposiums /training programs conducted by Department of Biochemistry, Osmania University, Hyderabad.
- 4 Attended Conference organized by Society for Biological Chemists, India (2001).
- 5 Attended National Symposium on “Developments in Microbial Biochemistry and its impact on Biotechnology”. (2002) Organized by Department of Biochemistry, Osmania University.