

Name: Dr. Ashish Saroha

Designation: Visiting Assistant Professor-Biotechnology

Phone:

E-mail: vf.ashishsaroha@gscuniversity.ac.in

School: School of Science



Research Interest:

- Cancer Immunology and Immunotherapy, Glycobiology, Proteomics

Academic Background:

Degree	Subject	University	Year
PhD	Biochemistry	CSIR-Institute of Genomics and integrative Biology (IGIB)	2013
MSc	Biotechnology	M.S. University, Baroda	2002
BSc	Chemistry, Biology	H.N.B Garhwal University, Uttarakhand	1999

Professional Experience:

From	Period	Position	Organisation
August 2020	Till date	Visiting Scientist	Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Mumbai
July 2016	June 2019	Academic consultant	Weizmann Institute of Science, Israel
July 2012	June 2016	Postdoctoral fellow	Weizmann Institute of Science, Israel
May 2009	April 2012	Senior Research Fellow	CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi
April 2006	March 2008	Product Executive	Labmate Asia Pvt Ltd, New Delhi
April 2003	March 2006	Research Assistant	CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi

Teaching Engagements:

Title	Course Code	Class Name	School Name
Biochemistry	MSO101	M.Sc Biotechnology	School of Science
Genetics	BSO301	B.Sc Biotechnology	School of Science

Publications:

- Verma N, Vinik Y, **Saroha A**, Niar NU, Ruppin E, Mills G, Karn T, Maina F, Dubey V, Khera L, Raj H, and Lev S. Synthetic lethal combination targeting BET uncovered intrinsic susceptibility of TNBC to ferroptosis. *Science Advances*, 2020; 6: eaba8968.
- Paget C, Deng S, Souillard D, Priestman DA, Speca S, Gerichten JV, Speak AO, **Saroha A**, Pewzner-Jung Y, Futerman AH, Mallevaey T, Faveeuw C, Gu X, Platt FM, Sandhoff R and Trottein F. TLR9-mediated dendritic cell activation uncovers mammalian ganglioside species with specific ceramide backbones that activate invariant natural killer T cells. *PLOS Biol.* 2019 Mar 1;17(3):e3000169.
- Kedan A, Verma N, **Saroha A**, Shreberk-Shaked M, Müller AK, Nair NU, Lev S. PYK2 negatively regulates the Hippo pathway in TNBC by stabilizing TAZ protein. *Cell Death Dis.* 2018 Sep 24; 9(10):985.
- **Saroha A**, Pewzner-Jung Y, Sharma P, Kelly S, Merrill AH, Trottein F, Paget C, Lang KS and Futerman AH. Critical role for very long chain sphingolipid in development and homeostasis of invariant natural killer T cells. *Front. Immunol.* 2017; 18 :1386.
- Hubel E, **Saroha A**, Park WJ, Pewzner-Jung Y, Lavoie EG, Futerman AH, Bruck R, Fishman S, Dranoff JA, Shibolet O and Zivibel I. Sortilin deficiency reduces ductular reaction, hepatocyte apoptosis and liver fibrosis in cholestatic-induced liver injury. *Am. J. Pathol.* 2017; 187(1):122-133.
- Mondal G, **Saroha A**, Bose PP, Chatterjee BP. Altered glycosylation, expression of serum haptoglobin and alpha-1-antitrypsin in chronic hepatitis C, hepatitis C induced liver cirrhosis and hepatocellular carcinoma patients. *Glycoconj J.* 2016; 33(2):209-18.
- Ali M, **Saroha A**, Pewzner-Jung Y, Futerman AH. LPS-mediated septic shock is augmented in ceramide synthase 2 null mice due to elevated activity of TNF α -converting enzyme. *FEBS lett.* 2015; 589(17):2213-7.
- Rabinowich L, Fishman S, Hubel E, Thurm T, Park WJ, Pewzner-Jung Y, **Saroha A**, Erez N, Halpern Z, Futerman AH, Zivibel I. Sortilin deficiency improves the metabolic phenotype and reduces hepatic steatosis of mice subjected to diet-induced obesity. *J Hepatol.* 2015; 62(1): 175-81.
- Biswas S, Sharma S, **Saroha A**, Bhakuni DS, Malhotra R, Zahur M, Oellerich M, Das HR, Asif AR. Identification of novel autoantigen in the synovial fluid of rheumatoid arthritis patients using an immunoproteomics approach. *PLOS One* 2013; 8 (2): e56246.
- Roy S, Biswas S, **Saroha A**, Sahu D, Das HR. Enhanced expression and fucosylation of ficolin3 in plasma of RA patient. *Clin. Biochem.* 2013; 46(1-2):160-3.
- **Saroha A**, K Saravanan, Chatterjee BP, Das HR. Jacalin bound plasma O-glycoproteome and reduced sialylation of alpha 2-HS glycoprotein (A2HSG) in rheumatoid arthritis patients. *PLOS One.* 2012; 7 (10): e46374.
- Sahu D, **Saroha A**, Roy S, Das S, Srivastava PS, Das HR. Suramin ameliorates collagen induced arthritis. *Int. Immunopharmacol.* 2012; 12 (1): 288-93.
- **Saroha A**, Biswas S, Chatterjee BP and Das HR. Altered glycosylation and expression of plasma alpha-1-acid glycoprotein and haptoglobin in rheumatoid arthritis. *J. Chromatogr. B* 2011; 879:1839-1843.
- **Saroha A**, Das HR. Altered glycosylation in autoimmune diseases. *Trends Carbo. Res.* 2011; 3(2): 1-12.

- Biswas S, Sahu D, **Saroaha A**, Das HR. Glycoproteomic analysis of collagen induced arthritis in rats. *Trends Carbo. Res.* **2009**; **1(4): 12-20**.
- Biswas S, Agrawal P, **Saroaha A**, Das HR. Purification and mass spectrometric characterization of *Sesbania aculeata* (Dhaincha) stem lectin. *Protein J.* **2009**; **28 (10): 391-9**.
- Biswas S, **Saroaha A**, Das HR. A lectin from *Sesbania aculeata* (Dhaincha) roots and its possible function. *Biochemistry (Mosc)* **2009**; **74 (3):329-335**.
- Tripathi V, Nara S, Chaube SK, Rangari K, **Saroaha A**, Kariya KP, Singh H, Shrivastav TG. Development of Rapid and Sensitive One-Step Direct Enzyme Linked Immunosorbent Assay for 17- α -OH-Progesterone in Serum. *J. Immunoassay Immunochem.* **2008**; **29(2):117 -127**.
- Raghav SK, Gupta B, Agrawal C, **Saroaha A**, Das RH, Chaturvedi VP, Das HR. Altered expression and glycosylation of plasma proteins in rheumatoid arthritis. *Glycoconj. J.* **2006**; **23(3-4):167-173**.

Abstracts Published

- **Saroaha A**, Biswas S, K Saravanan, Chatterjee BP. Glycoproteomics in the diagnosis and understanding the pathogenesis of Rheumatoid Arthritis. Proceedings of XXII International Symposium on Glycoconjugates (Glyco XXII), Dalian, China. *Glycoconj J.* (2013) **30:299**.
- Biswas S, **Saroaha A**, Agrawal P, Sahu D, Das HR. Aberrant glycosylation of plasma and synovial fluid proteins in rheumatoid arthritis. Proceedings of human Genome meeting 2008 (HGM 2008), Hyderabad, India. *Genomic Med.* (2008) **2:286**

Patent Filed

- Lev Sima, Verma Nandini, **Saroaha Ashish**, Vinik Yaron. Methods of treating Breast cancer. Patent application No.: PCT/IL2020/050993, Filing Date: 10-Sep-2020, Country of filing: Israel

Book:

Awards/Recognitions:

- Invited speaker at Gordon research Conference on Short term susceptibility of Ceramide synthase 2 null mice to LCMV infection, IL Cioco, Italy 2016.
- Awarded prestigious Indo-Israel -PBC postdoctoral research fellowship by Israel council of higher education (ICHE) from Oct 2012-Sep 2015.
- Invited speaker at 99th Indian science congress association (ISCA) on Reduced sialylation in the N-linked glycans of alpha 2-HS glycoprotein (A2HSG)/Fetuin-A in plasma of RA patients at Odisha, India 2011.

- Senior Research fellowship by Indian Council of Medical Research (ICMR) from May 2009 - April 2012
- Awarded Scholarship by Department of Biotechnology to pursue M.Sc in Biotechnology in July 2000.