

BIO-DATA

1. Name: Praveen P. Balgir



2. Designation: Professor

3. Department: Biotechnology

4. Address for Correspondence : # 86, Salaria Vihar, Urban Estate Phase I, Patiala, Punjab INDIA 147 002, Mobile: 9872886277, balgirbt@live.com

5. Academic Qualifications:

Ph.D.	1983		Life Sciences
M.Phil	1982		Population Genetics
M.Sc.	1977	60%	Human Biology - University Gold medal
B.Sc.	1974	63%	Medical

6. **Area of Specialisation:** Medical Biotechnology, Microbial and Industrial Biotechnology, Molecular Genetics: iRNA, Human Genomics and Genetic Engineering: Mammalian, *S.pombe*, *Pediococci* and *E.coli* cells. Pharmacogenetics, Proteomics: 2DGE, Bioinformatics

7. Employment History :

1. Punjabi University, Patiala Mar., 2007- Cont. Professor
2. Punjabi University, Patiala Mar., 1990- 2007 Lecturer, Reader
3. Institute Of Medical Genetics, Moscow Dec., 1987-89 PDF
4. Delhi University July, 1984- 87 Research Associate
5. Delhi University June 1983-84 SRF Lady Tata Memorial trust trust

8 Any Other information: Medals/Awards/Honours/Received

- i) Gold Medal for First Position in M.Sc. Human Biology, Punjabi University

Scholarships:

- i) Punjabi University Merit Scholarship 1975-1977 (For Merit in M.Sc.)
- ii) Junior Research Fellow- SRF (U.G.C., New Delhi)- 1978-1983
- iii) Post Doctoral Fellowship Govt. of U.S.S.R. 1987-1989.

Memberships of Professional Bodies:

1. Life Member of Indian Society of Human Genetics.
2. Life Member of Association of Microbiologists of India
3. Life Member of Indian Science Congress Association
4. Life Member of Punjab Academy of Sciences
5. Life Member of Probiotics Association of India.
6. Life Member of Gastrointestinal Infection Society of India

Research projects:

DBT - "Pharmacogenomics Of Hypertension Amongst Punjabi Population" 2012 – 2017 No. BT/PR 4548/INF/22/146/2012

DST - "Expression Systems for Food grade Lactic Acid Bacteria." 2010 – 2014, No. SR/SO/HS-0038/2009

DBT - "Target genes for siRNA therapeutics in Atherosclerosis: selection, validation and testing in cell based and animal model system". 2008-2012, No. BT/PR-10694/AGR/36/587/2008

AICTE - "Isolation of Pediocin producing LAB using Molecular biology techniques and study of their biopreservative potential". 2001- 2004, No.8019/R&D II/ Bio (138)/2000-2001

UGC - "DNA Polymorphism of Apolipoprotein E in Punjabi Population : Its use in the investigation of Alzheimer's Disease and Coronary Heart Disease". 1998-2001, F3-59/98

UGC - "Apolipoprotein Polymorphism amongst some populations of Punjab". 1992-96(Co-Investigator) No. F3-79/91, July,1992

Minor Research Project:

UGC - Genetic characterization of Textile dye degrading microbial isolates". 1996-98, No. 4097, 12-08-96

RESEARCH GUIDANCE

Post Doctoral Fellow:

Dr. Shruti " To Investigate RNA Interference Technology for Inhibition of β -Catenin Pathway for development of therapeutics for Colon Cancer" **DST SERB NPDF 2017- cont.**

Ph.D. AWARDED:

1. **Dr. Puneet Pal Singh:** "Estimation of Genetic Variability of Apolipoproteins among some Population groups of Punjab".1999 - as Co supervisor
2. **Dr. Mandeep Kaur:** " Restriction isotyping of human Apolipoprotein E: Its interaction with exogenous factors and implication for prognosis and diagnosis among patients with dementia of Alzheimer's type" - 2003

3. **Dr.(Mrs.) Baljinder Kaur:**“Purification, characterisation and Molecular Genetics of Bacteriocin obtained from natural isolate of *Pediococcus* sps.”- 2003
4. **Dr. Parwinder Pal Singh:** “ Process Optimisation of bacteriocin production by an isolate of *Pediococcus* sp. and study of its biopreservative potential”. -2004
5. **Dr. Arvinder Singh:** “Functional SNPs of MDR1 and CYP3A genes in Punjabi Population and their Pharmacotherapeutic implications ” - April, 2007
6. **Dr.(Mrs.) Gurloveen Kaur:** “ Interaction of LXR variants with select SNPs of ABCA1, LCAT and ACAT2 genes in CAD patients using cell based Assay”- July, 2009
7. **Dr.(Mrs.) Divya Khanna,** “Interaction of Niemann-Pick C1 like 1 and Apolipoprotein E genes amongst CAD patients with NPC1L1 as target for in vitro therapeutic RNAi”. June, 2009
8. **Dr.(Mrs.) Puja Bhatia** “Development and application of expression vector based on Ped+ plasmid of *Pediococcus acidilactici* MTCC 5101” 2010
9. **Dr.(Mrs.)Ms. Nipunjot Kaur Soni:** “ Development of protease-deficient strain of *Schizosaccharomyces pombe* through gene silencing approach” 2013
10. **Dr.(Mrs.) Parvinder Pal Kaur** (Co-supervisor) 2013 “Molecular typing of various biotypes of *Lactobacillus acidophilus*” 2013
11. **Dr. Balvir Kumar** Study of production and potential applications of recombinant Pediocin of *Pediococcus acidilactici* MTCC 5101” 2013
12. **Dr. (Mrs.) Bharti Mittu** “A Study on Anti-Gardnerella vaginalis Bacteriocin Producing Human Vaginal LAB Isolate” (Co-supervisor) 2013
13. **Dr. (Mrs.) Mansimran Kaur Randhawa** “Immunomodulatory and Biotherapeutic potential of Probiotic Bacterial DNA” (Co-supervisor) 2013
14. **Dr.(Mrs.) Dinesh Kalra** “Metabolic engineering of *E. coli* for biotransformation of Eugenol to ferulic acid” 2014
15. **Dr.(Mrs.) Anjali Chauhan** “Molecular characterization of a novel bacterial isolate from *Valeriana jatamansi* for plant growth promoting traits” 2015
16. **Dr. Deepak Kapoor** “Antiatherosclerotic and Antiinflammatory potential of VCAM 1 and ALOX5AP gene silencing” 2017
17. **Dr.(Mrs.) Puneet Kaur** “Prediction and experimental validation of *Propionibacterium acnes* small non-coding RNAs and their targets” 2018

Students Registered for Ph.D.:

18. **Ms. Tejinder Kaur** “Development of a shuttle vector for Heterologous protein expression in food grade lactic acid bacteria” 2011
19. **Ms. Jaspreet Kaur** “Pharmacogenetic analysis of functional SNPs of Beta-Adrenoreceptor and RAAS Genes amongst hypertensive Punjabi Population” 2013
20. **Ms. Harsimran Kaur** – Co-supervisor “Pharmacogenetic Analysis Of *Nedd4l*, *Addi*, *Gnb3*, *Kcnj1*, *Prwnk1*, *Prwnk4*, Genes In Hypertensive Populations Of Punjab” 2014
21. **Ms. Maleeka Sharma** “Production Of Heterologous Antihypertensive Peptides In Lactic Acid Bacteria And Assessment Of Their Bioefficacy In Rat Model” 2015
22. **Ms. Suman** "Study of functional SNPs of human *GSDMA*, *GSDMC*, *GSDMD*, *DFNA5*, *DFNB59* genes amongst alopecia patients and validation of gene editing using cell based assay" 2016

23. **Mr. Vishal** "Study of Caspase1, Gasdermin D and *KCTD6* in human pyroptotic pathway using gene editing in cell based assay" 2016

RESOURCE PERSON:

1. Invited Lecture on "**Bacterial sRNAs as target New Drug Molecules**" Himachal Pradesh University, Shimla. 16th March, 2018.
2. Invited lecture on "**Biotechnology for Sustainable Development**" in National Conference on Strategies to Mitigate the Effects of Climate Change: Steps Towards Sustainable Development held at Maharaja Agrasen University, Baddi, Solan. 9th December, 2017.
3. Delivered a keynote address in **DST sponsored 8th INSPIRE program** at Asian Educational Institute, Patiala. 22nd – 26th November, 2017.
4. UGC Sponsored 32nd Orientation Course at Punjabi University, Patiala – April to May, 2017. Lecture Delivered "**Microbiome and health**" 10th May, 2017.
5. UGC Sponsored 58th Refresher Course in Research Methodology in Physical and Life Sciences at Punjabi University, Patiala – January, 2017. Lecture Delivered "**Genetic Algorithm: An Introduction**" 20th January, 2017.
6. UGC Sponsored 57th Refresher Course in Information Technology at Punjabi University, Patiala – December, 2016. Lecture Delivered "**Genetics and Genetic Algorithm**" 9th December, 2016.
7. UGC Sponsored 30th Orientation Course at Punjabi University, Patiala – June to July, 2016. Lecture Delivered "**Medical Biotechnology Perspective: Present and Future**" 8th July, 2016.
8. UGC Sponsored 56th Refresher Course in Physical Sciences at Punjabi University, Patiala – June to July, 2016. Lecture Delivered "**Biotechnology Horizon: Interdisciplinary Green Technology**" 23rd June, 2016.
9. UGC Sponsored 29th Orientation Course at Punjabi University, Patiala – May to June, 2016. Lecture Delivered "**Medical Biotechnology: Present and Future Prospects**" 7th June, 2016.
10. UGC Sponsored 28th Orientation Course at Punjabi University, Patiala – April to May, 2016. Lecture Delivered "**Microbes for health**" 2nd May, 2016.
11. Invited Lecture on "**Biotechnology Frontiers: Biomedical Research and Applications**" in DST INSPIRE sponsored program at Asian Educational Institute Patiala, 25th September, 2015.
12. Invited Lecture on "**Revisiting the RNA World: New Frontier in Biomedical Research and Applications**" at CGC Landran, 21st August, 2015.
13. Delivered a lecture on "**DNA: The Molecule Of Life- Isolation and Amplification**" at IPLS Workshop for Research scholars in Punjabi University, Patiala. 10th June, 2015.
14. Invited Speaker on World Science Day for Peace and Development on 10th Nov, 2014 organized by SUS, Tangori. Lecture Delivered "**Biotechnology For Peace And Development**" 10th Nov., 2014
15. Workshop for School students at Punjabi University School: "**Nutrition And Health Paradigm For Young Adults**" -28th Oct., 2014

16. Invited Lecture at 17th PUNJAB SCIENCE CONGRESS on 16 Feb 2014, at Punjab Technical University, Jalandhar. Lecture Delivered **“Medical Biotechnology:Novel Products And Prospects”**
17. UGC Sponsored 47th Refresher Course in Life Sciences At Punjabi University, Patiala.

Lectures Delivered: 1. **“R.T.- PCR- Practical and Applications”**- 4th Dec.,2014

2. **“Illuminating the Silence : Interference RNA”** – 5th Dec.,2014

18. UGC Sponsored 48th Refresher Course in Physical Sciences At Punjabi University, Patiala. Lecture Delivered **“Faculty of Physical Sciences And Research”**- 19th Dec., 2014
19. UGC Sponsored 23th Orientation Course at Punjabi University, Patiala -December, 2014. Lecture Delivered **“Research Capacity Building in Higher Education”**15th Dec.2014
20. UGC Sponsored 21th Orientation Course At Punjabi University, Patiala- June, 2014. Lectures Delivered 1. **“Faculty and Research: Capacity Building”**-25 June 2014; 2. **“Research Project: Application and Presentation”**-26 June 2014
21. UGC Sponsored 22th Orientation Course at Punjabi University, Patiala- July, 2014 Lectures Delivered 1. **“Faculty and Research: Capacity Building in Higher Education- Part-I -04th July 2014”** 2. **Faculty and Research: Capacity Building in Higher Education-Part-II- 04th July 2014”**
22. UGC Sponsored 20th Orientation Course At Punjabi University, Patiala-May, 2014. Lecture Delivered **“Food Biotechnology and Security Regulations”**- 02th May, 2014.
23. UGC Sponsored 18th Orientation Course At Punjabi University, Patiala- October, 2013. Lecture Delivered: **“The Blue, Green, White and Red of Biotechnology”**-9th Oct, 2013.
24. UGC Sponsored 17th Orientation Course At Punjabi University, Patiala- July, 2013. Lecture Delivered: **“Biotechnology: Medical Prospects”** -25th July, 2013
25. UGC Sponsored Refresher course in Health and Life Sciences At Academic Staff College, Guru Nanak Dev University, Amritsar- July 2013.2013. Lectures Delivered 1.**“Illuminating Silence I: Structure and Function of RNAi”**12th July, 2013 2.**“Illuminating Silence II: RNAi Applications”**- 12th July, 2013
26. Panelist at ISCA Patiala –Chapter organized Panel Discussion on **“Academics and Career Opportunities in Basic and Applied Sciences”** on 25-4-13
27. Invited Speaker on National seminar on “Human Genomics” on march 25-26 2013 organized by GNDU, Amritsar, Punjab. Lecture Delivered: **“Interference RNA Therapeutics in Atherosclerosis”**
28. UGC Sponsored 32nd Refresher Course in Life Sciences At Punjabi University, Patiala-December 2012. Lecture Delivered 1.**“Interference RNAs: Small RNA Big Impact”**- 10th Dec, 2012 2. **“RT-PCR-Practical”** -10th Dec, 2012.
29. UGC Sponsored 10th Orientation Course At Punjabi University, Patiala –November 2011. Lecture Delivered **“Food Biotechnology”** 15th Nov., 2011.
30. UGC Sponsored 9th Orientation Course At Punjabi University, Patiala-October,2011. Lecture Delivered 1. **“Food Biotechnology”** 7th Oct, 2011. 2. **“Biosafety and Ethical Issues”** 7th Oct, 2011.
31. UGC Sponsored 6th Orientation Course At Punjabi University, Patiala-January, 2011. Lecture Delivered **“Biotechnology Prospects:Present and Future”**- 28th Jan,2011

32. UGC Sponsored 7th Orientation Course At Punjabi University, Patiala- March, 2011. Lecture Delivered **“Food Biotechnology”** 25th March, 2011.
33. National Seminar Cum Workshop 2011 ON “Recent Trends In Biological Sciences” On 23-24 Feb, 2011. Lecture Delivered: **“Medical Biotechnology”**
34. Workshop for science teachers working in Government schools on **“Microorganisms: Let us Observe & Learn,”** September 12-14, 2011, organized by Punjabi University, Patiala.
35. UGC sponsored three week Refresher course from 25th Feb to 17th Mar., 2011 At Kurukshetra University, Kurukshetra
36. UGC Sponsored Refresher Course in Life Sciences, At Punjabi University, Patiala- October, 2010. Lecture Delivered **“RNA Interference: Little RNAs Big Impact”**- 13th Oct. 2010
37. UGC Seminar “Emerging Trends in Biotechnology & Bioinformatics” 29-30 Sept, 2010 at KMV Jalandhar. Lecture Delivered **“Perspectives of Medical Biotechnology”** 29th Sept. 2010
38. UGC Symposium on “GENOMICS OF COMPLEX DISEASES” on 2nd Mar., 2010 at Department of Human Genetics, GNDU, Amritsar. Lecture Delivered **“Genomics of Atherosclerosis”**.
39. UGC Seminar on “Biotechnology Expanding Horizon”- 6th Feb., 2010 at S.D.College Barnala. Lecture Delivered **“Industrial Biotechnology: Green Technology”**.
40. UGC Seminar on “New Horizons in Biotechnology” on 15th Oct., 2009 at Multani Mal Modi College, Patiala. Lecture Delivered **“Transgenics and Biopharming”**.

Organizational, Administrative and Academic Assignments:

Conferences/Symposia Organized:

1. *Member Organizing Committee:* National Seminar on “*Genetically Modified Foods: Current Scenario,*” January 19-20, 2012, organized by Punjabi University, Patiala.
2. *Member Academic Co-ordination Committee:* International Conference on “*Women, Peace and security*” October 26-27, 2012, organized by Punjabi University, Patiala.
3. *Member Co-ordination Committee:* International Conference on “*Women and development*” November 22-23, 2013, organized by Punjabi University, Patiala. Moderator: Panel Discussion: Food Security Issue: “Food Fortification and Health of School Children”
4. *Member Organizing Committee:* International Conference on “*Industrial Biotechnology*” & IX Annual Convention of The Biotech Research Society, India, November 21-24, 2011, organized by Punjabi University, Patiala.
5. *Member Advisory Committee:* National Seminar and Workshop on “*Recent Trends in Biological Sciences,*” February 23-24, 2011, organized by Asian Institution, Patiala.
6. *Organizing Secretary:* National Symposium on “*Biotech Vistas 2011,*” March 2-3, 2011, organized by Punjabi University, Patiala. (SPONSORED BY: DBT, DST, UGC)
7. *Convener:* CSIR sponsored National Symposium on “*Biotech 2009: Present and Future Perspectives,*” March 19-20, 2009, organized by Punjabi University, Patiala.

8. *Member Organizing Committee*: 1st Punjabi University Science Congress & National Science Day Celebrations February 28, 2011, organized by Punjabi University, Patiala.
9. *Member Organizing Committee*: National Symposium on “*New Horizons in Fermentation and Food Biotechnology*,” March 21-22, 2006, organized by Punjabi University, Patiala.
10. *Organizing Secretary*: National Symposium on “*Med Biotech 2005*,” February 2-3, 2005, organized by Punjabi University, Patiala.
11. *Joint Organizing Secretary cum Treasurer*: National Symposium on “*Advances in Industrial Biotechnology*,” February 23-24, 2004, organized by Punjabi University, Patiala.
12. *Member Organizing Committee*: National Symposium on “*Perspectives in Biotechnology*,” December 19-20, 1997, organized by Punjabi University, Patiala.
13. *Member Co-ordination Committee*: International Conference on “*Women and development: Issues & Initiatives*” March 26-27 March, 2010, organized by Punjabi University, Patiala.
14. *Member Academic Co-ordination Committee*: International Conference on “*Capacity Building for Women Managers in Higher Education*” January 17-21, 2011, organized by Punjabi University, Patiala.

Conferences Attended:

1. GISICON 2017, AIIMS Bhopal 26-29th Oct., 2017
2. International Symposium and 41th Annual Meeting of Indian Society of Human Genetics” (3rd-5th March 2016) – Chennai
3. International Symposium on GENOMICS in HEALTH and DISEASE & 40th ANNUAL CONFERENCE of INDIAN SOCIETY OF HUMAN GENETICS at ICMR on 28-30 January 2015
4. International Conference on Current Trends and Genetics in heart failure and cardiac arrhythmias at PGIMER, CHANDIGARH on 31 Jan-1 Feb, 2015
5. 2nd PAi Conference and International Symposium on “Probiotics and Microbiome: Gut and Beyond” held at Habitat World at India Habitat Centre, New Delhi on November 3-4, 2014
6. 2nd International Workshop on Micronutrients and Child Health (MCHWS-2014) held at AIIMS, New Delhi and presented a research paper entitled: Metagenome Analysis: A tool in assessment of Probiotics for anemia amelioration on November 3-7, 2014
7. 4th Biennial Conference of Gastrointestinal Infection Society of India held at GMCH, Sector-32, Chandigarh on April 11-12, 2014
8. 6th International Conference on “Fermented Foods, Health Status and Social Well-being” held at Anand Agricultural University, Gujarat on December 6-7, 2013

9. UGC sponsored National Seminar on Human Genomics held at Department of Human Genetics, GNDU, Amritsar on March 25-26, 2013
10. International Conference on “Next Revolution in Genetics and Genomics Applications in Health and Disease” held at New Delhi on January 27-29, 2013
11. International Conference on Industrial Biotechnology and 9th Convention of the Biotech Research Society of India and Indo-Italian Workshop on Food Biotechnology: Industrial Processing, Safety and Health held at Department of Biotechnology, Punjabi University, Patiala on November 21-23, 2012
12. 1st Annual Conference and International Symposium on Probiotics for Human Health- New Innovations and Emerging Trends held at Habitat World at India Habitat Centre, New Delhi on August 27-28, 2012
13. National Conference on Current Trends in Biotechnology-2012 held at KVA DAV College for Women, Karnal on April 3, 2012
14. DBT and UGC sponsored National Seminar on Biotech Vistas-2011 held at Department of Biotechnology, Punjabi University, Patiala on March 2-3, 2011
15. Indo-US Workshop on Epigenetics Regulation & Genome Control at CCMB, Hyderabad, February, 2009

Administrative and Academic Assignments:

1. Currently holding the assignment of Co-coordinator DBT sponsored Interdisciplinary Programme in Life Sciences 2012- 2017
2. Presently Additional Provost Girls, Punjabi University, Patiala. May, 2015- Dec.2015.
3. Nominated member of Academic committee of Women Studies Centre Punjabi University, Patiala; from July 2009- 2015.
4. Senior Warden Two Girl’s Hostels Punjabi University, Patiala. Jan., 2013- 2015
5. Head Department of Biotechnology; March, 2008- March, 2011.
6. Chairperson Undergraduate and Post-Graduate Board of studies in Biotechnology, Punjabi University, Patiala w.e.f. March, 2008 to March 2011.
7. Member Departmental A.C.D. March 1990- cont
8. Member Post-Graduate Board of studies and Departmental Research Board in Biotechnology, Punjabi University, Patiala since March 1990.
9. Presented Departmental Profile as Chairperson at D S T, GOI; FIST meeting -The Department of Biotechnology awarded Rs. 65 Lacs. From 2011- 2016.
10. Represented the Departmental Profile at D S T, GOI; FIST meeting on 6th Oct., 2002 at Bangalore Agriculture University- The Department of Biotechnology awarded Rs. 35 Lacs. From 2003-2008.
11. Nominated Member Punjabi University “Prevention of Sexual Harassment of Women at Workplace Cell” – Harassment Redressal Committee 2004-5, 2007-8.

12. As President Biotechnology Society of the Department, 1992-93, 98-99 & 2002-03. Organized Educational tours, Industrial visits, Sports Day, Lohri function etc. for the students. Organised Extension Lectures of Executives from industries.
13. Founding President of "Biosafety Committee of the Department" framed rules for the same.
14. Nominated Member for Institutional Biosafety committee, Animal Ethics committee and Clinical Ethical Committee.
15. Member Post Graduate Board of studies in Biotechnology, Kurukshetra University, Kurukshetra for the year 2014-2015, Sri Guru Granth Sahib World University, Fatehgarh Sahib . Punjab, Punjab Technical University Jalandhar. Lovely Professional University Jalandhar.
16. Member Academic council Punjabi University, Patiala, session 2010-2011.
17. Member of various selection committees constituted by Punjabi University, Patiala for the selection of Principals and Teachers in the affiliated colleges.
18. Member selection / promotion Committee of University Teachers Kurukshetra University, Sri Guru Granth Sahib World University, Fatehgarh Sahib. Punjab.
19. Acted as paper setter and evaluator for various University level Undergraduate and Post Graduate Examinations of Punjabi University, Patiala, Panjab University, Chandigarh; P. A. U. Ludhiana; Guru Nanak Dev University, Amritsar; Lovely Professional University, Jalandhar; Kurukshetra University, Kurukshetra; Himachal Pradesh University, Shimla, Sri Guru Granth Sahib World University, Fatehgarh Sahib . Punjab.

PUBLICATIONS:

Book Chapters:

1. Balgir, Praveen P., Kaur, J. (2018) *In silico* Analysis of Human AGTR1 Gene and Precision Medicine Amongst Hypertensive Population. **Advances in Animal Biotechnology and Its Applications (Springer)**, Eds. S.K.Gahlawat, J.S.Duhan, R.K.Salar, P.Siwach, S.Kumar and P.Kaur (In Press).
2. Balgir, Praveen P., Kaur, T. (2018) Antiproliferative Effects of Probiotics. **Advances in Animal Biotechnology and Its Applications (Springer)**, Eds. S.K.Gahlawat, J.S.Duhan, R.K.Salar, P.Siwach, S.Kumar and P.Kaur (In Press).
3. Balgir, Praveen P., Kaur, P. (2018) Expression Analysis and Target Validation of Bacterial Small RNAs. **Advances in Animal Biotechnology and Its Applications (Springer)**, Eds. S.K.Gahlawat, J.S.Duhan, R.K.Salar, P.Siwach, S.Kumar and P.Kaur (In Press).
4. Balgir, Praveen P., Kapoor, D. (2018) Gene Silencing Human VCAM1. **Advances in Animal Biotechnology and Its Applications (Springer)**, Eds. S.K.Gahlawat, J.S.Duhan, R.K.Salar, P.Siwach, S.Kumar and P.Kaur (In Press).
5. Balgir, Praveen P., Rani S. and Vishal (2018) Genome Editing. **Advances in Animal Biotechnology and Its Applications (Springer)**, Eds. S.K.Gahlawat, J.S.Duhan, R.K.Salar, P.Siwach, S.Kumar and P.Kaur (In Press).
6. Praveen P. Balgir and Baljinder Kaur (2005) Chapter No.9 titled "Probiotic Functional Foods: new Concepts in Nutrition and Health" pp. 149-176. In "**Advances in Biotechnology**" Ed. P.C.Trivedi. Publ. Agrobios Jodhpur India. 2005

Research Articles:

1. Praveen P. Balgir and Suman Rani (2017) *In silico* analysis of human GSDMA and GSDMD genes for functional and structural impact of nsSNPs. *International Journal of Recent scientific Research*. Vol.8 (6) 17977-17984. **ISSN0976-3031**
2. ** Balgir, PP., Kapoor, D. (2016) *In Vitro* Validation of siRNA antagonistic to Human VCAM-I in U937 cells. *International Journal of Recent Scientific Research*. 7(7): 12449-12453. **ISSN0976-3031**
3. ** Balgir, PP., Goel, RK., Kaur, J. and Sharma, M. (2016) *In silico* Prediction of functional and structural impact of Non-synonymous SNPs in human Adrenergic Beta-receptors. *International Journal of Recent Scientific Research*. 7(5), pp.11347-11353. **ISSN0976-3031**
4. *Balgir, PP., Goel, RK., Sharma, M. and Kaur, J. (2016) In silico Analysis Of Functional nsSNPs Of Various Genes involved in hypertension. *Recent Advances in emerging technologies*. **ISBN:978-81-929890-1-3**
5. **Balgir, Praveen P., Kaur, P. (2016) In silico prediction and qPCR validation of novel sRNAs in *Propionibacterium acnes* KPA171202. *Journal of Genetic Engineering and Biotechnology*, Volume 14, Issue 1, Pages 169–176. **ISSN: 1687-157X. Elsevier.**
6. **Praveen P. Balgir, Tejinder Kaur and Maleeka Sharma (2015) Antihypertensive peptides derived from food sources. *MOJ Food Processing & Technology*, Volume 32, Issue 1, page no. 00024. **ISSN: 2381-182X. Medcrave Group.**
7. *Balgir, P. P., Kaur, B. and Kaur, T. (2015) Gut microbiome dysbiosis in metabolic disorders: implications for probiotics as prospective investigational new drugs. *Journal of Gastrointestinal Infections*, 5:1-8. **ISSN 2277 5862.**
8. *Praveen P. Balgir, Baljinder Kaur and Tejinder Kaur (2014) A Preliminary Clinical Evaluation of Probiotics *Pediococcus Acidilactici* and *Bacillus Coagulans* MTCC 492 on Young Anemic Women. *International Journal of Fermented Foods* Volume 3 No. 1; 45-58. **ISSN No. 2319-3549. New Delhi Publishers.**
9. *Chauhan, A., Balgir, P. P. and Shirkot, C. K. (2014). Characterization of *Aneurinibacillus aneurinilyticus* strain CKMV1 as a plant growth promoting rhizobacteria. *International Journal of Agriculture, Environment and Biotechnology* 6(1): 29-37. **ISSN (online) 0974-1712; (print) 2230-732X (NAAS - 4.10). New Delhi Publishers.**
10. *Chauhan, A., Balgir, P. P. and Shirkot, C. K. (2014). Antifungal potential of native strain isolated from rhizosphere soil of *Valeriana Jatamansi* of temperate regions of Himachal Pradesh. *Journal of Applied Horticulture*. 16(2): 131-135. **ISSN: 0972-1045 (NAAS – 3.79). Society for advancement of horticulture.**
11. *Balgir, P., Kaur, G., Kapoor, D., Kaur, J. (2014). Association of Functional SNP R219K of ABCA1 with HDL-Cholesterol Levels And Susceptibility To Coronary Artery Disease Amongst Population of Punjab. *Journal Punjab Academy of Sciences* 11-12:19-24. **ISSN 2229-7014.**
12. *Praveen P. Balgir and Dinesh Kalra (2014) Domain Analysis and Isolation of Coniferyl Alcohol Dehydrogenase Gene from *Pseudomonas*

- nitroreducens* Jin1. *British Biotechnology Journal* 4(6): 684-695. **ISSN: 2231-2927. Science Domain International (SDI).**
13. *Praveen P. Balgir and Dinesh Kalra (2013) In silico characterization of functional domain and isolation of coniferyl aldehyde dehydrogenase gene from *Pseudomonas nitroreducens* Jin1. *Asian Journal of Biological and Life sciences*; 2(2) 176-184. **ISSN 2278- 747X (PRINT),ISSN 2278 - 5957 (ONLINE) (IF 0.21). Pharmaceutical and Biological Society.**
 14. *Praveen P. Balgir, Baljinder Kaur, Tejinder Kaur, Natisha Daroch, and Gurpreet Kaur (2013) *In Vitro* and *In Vivo* Survival and Colonic Adhesion of *Pediococcus acidilactici* MTCC5101 in Human Gut. *BioMed Research International* , <http://dx.doi.org/10.1155/2013/583850>. **ISSN 1110-7243 (IF-2.88). Hindawi publishing corporation.**
 15. *Kaur, B., Kaur, T. and Balgir, P. P. (2013) Role of Probiotic Fortified Foods in Health security of Women. Proceedings of **4th International Conference on Women, Peace and Security**, Women's Studies Centre, Punjabi University, Patiala, October 26-27, 2012. ISBN 978-81-302-0240-2.
 16. * Balgir, P. P; Kaur, B. and Kaur, T. (2012) Role of probiotics in reducing post-partum obesity in women. Proceedings of **3rd International Conference on Mainstreaming Gender: Issues and Challenges**, Women's Studies Centre, Punjabi University, Patiala, October 26-27, 2012. ISBN 978-81-302-0182-5.
 17. *Balvir Kumar, Praveen P. Balgir, Baljinder Kaur, Bharti Mittu and Neena Garg (2012) Antimicrobial And Spermicidal Activity Of Native And Recombinant Pediocin CP2: A Comparative Evaluation. *Archives of Clinical Microbiology*. Vol. 3 No. 3:2 doi: 10.3823/254 (CI-3). **ISSN 1989-8436. IF 0.564. Insight medical publishing group.**
 18. *Balvir Kumar, Praveen P Balgir, Baljinder Kaur, Bharti Mittu and Ashish Chauhan (2012) In Vitro Cytotoxicity of Native and Rec-Pediocin CP2 Against Cancer Cell Lines: A Comparative Study. *Pharmaceut Anal Acta* , 3:8 dx.doi.org/10.4172/2153-2435.1000183. **ISSN : 2153-2435 (I F- 2.49) Publisher: OMICS International**
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7. Contributed entries to "**Bal Vishwa Kosh**" in the subjects of Biotechnology and Biophysics. -2006

SequenceS Submitted to Genbank databases:

1. Balgir, P.P., **Bhatia, P.** and Kaur, B. Nucleotide sequence of Ped A gene (*Pediococcus acidilactici* strain MTCC 5101 PedA gene, partial cds.) under accession number **EU826148.**
2. Balgir, P.P., **Bhatia, P.** and Kaur, B. Partial ped operon (*Pediococcus acidilactici* strain MTCC 5101 plasmid pCP289 ped operon, partial sequence.) under accession number **GQ214404..**
3. **Aneurinibacillus aneurinilyticus partial gdh gene for glucose-1-dehydrogenase, strain CKMV1** - GenBank Accession No: HF549289.1
4. **Bacillus subtilis strain CKMV2 16S ribosomal RNA gene, partial sequence** - GenBank Accession No: KC329526.1
5. **Bacillus sp. CKMV3 16S ribosomal RNA gene, partial sequence** - GenBank Accession No: KC329527.1
6. **Bacillus subtilis strain CKMV4 16S ribosomal RNA gene, partial sequence** - GenBank Accession No: KC329525.1
7. ***Pediococcus acidilactici* MTCC 5101 16S ribosomal RNA gene, partial sequence** GenBank accession no. KF305774
8. ***Propionibacterium acnes* strain KPA171202 small non-coding RNAs-**
 - i) **sPPAK1**, GenBank accession no. KF722796
 - ii) **sPPAK4**, GenBank accession no. KP881479
 - iii) **sPPAK5** GenBank accession no. KP881480

iv) **sPPAK7** : GenBank accession no KP218043

M. Sc. Student Projects Supervised:

Supervised: 88

Under supervision: 06