



## CURRICULUM VITAE

<b>Name:</b>	Pranveer Singh	 <p style="text-align: center;"><i>Photo</i></p>
<b>Designation:</b>	Professor	
<b>School:</b>	Life Sciences	
<b>Department:</b>	Zoology	
<b>Specialisation &amp; Research Interests:</b>	Protein folding and dynamics using approaches of proteomics & biophysics; Disease biology; Evolutionary population genetics	
<b>Email IDs (Official &amp; Personal)</b>	<a href="mailto:pranveersingh@mgcub.ac.in">pranveersingh@mgcub.ac.in</a> ; <a href="mailto:mailpranveer@gmail.com">mailpranveer@gmail.com</a>	
<b>Mobile No.:</b>	9424930522; 9109303833	
<b>Address:</b>	Ambikanagar, Motihari – 845401, Bihar	

### 2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
Ph.D.	2007	Banaras Hindu University (BHU), Varanasi (UP)
M.Sc.	2000	Allahabad University, Allahabad, (UP)
B.Sc.	1998	Allahabad University, Allahabad, (UP)

Degree	Year	University / Board
XII	1994	Kendriya Vidyalaya, Azamgarh (UP) CBSE Board
X	1992	Kendriya Vidyalaya, Azamgarh (UP) CBSE Board

**3. ANY OTHER QUALIFICATION:**

CSIR - JRF

**4. PROFESSIONAL EXPERIENCE:**

Organisation/Institute/University	Position Held	Duration
Mahatma Gandhi Central University, Motihari, Bihar	Professor	November 16, 2019 till present
Mahatma Gandhi Central University, Motihari, Bihar	Associate Professor	November 16, 2016 to November 16, 2019
Indira Gandhi National Tribal University, Amarkantak, MP	Assistant Professor	September 17, 2012 to November 15, 2016
Indian Institute of Science (IISc), Bangalore	Postdoctoral Fellow (IAVI, USA)	August 01, 2011 to September 14, 2012
Indian Institute of Science (IISc), Bangalore	UGC-DS Kothari Postdoctoral Fellow	August 01, 2008 to July 31, 2011
Indian Institute of Science (IISc), Bangalore	DBT-Postdoctoral Fellow	May 01, 2008 to July 31, 2008
Banaras Hindu University (BHU), Varanasi, UP	Research Associate (CSIR-RA)	October 17, 2007 to April 17, 2008

**5. ADMINISTRATIVE ASSIGNMENTS:**

Position Held	Duration	Nature of Work
Dean, School of Life Sciences, Mahatma Gandhi Central University, Motihari, Bihar	November 21, 2016 to July 31, 2017	Administrative
Head, Department of Zoology, Mahatma Gandhi Central University, Motihari, Bihar	September 18, 2019	Administrative

**6. COURSES TAUGHT:****Indira Gandhi National Tribal University (IGNTU), Amarkantak, Madhya Pradesh****Postgraduate**

MZT 101: Biosystematics and Quantitative Biology  
 MZT 201: Chordates: Structure, Function and Evolutionary Significance  
 MZT 203: Biochemistry and Biophysics  
 MZT 204: Environmental Biology and Animal Behaviour  
 MZT 302: Animal Physiology  
 MZT 303: Genetics and Evolution  
 MZT 403: Molecular Techniques  
 MZE 304 & 404: Molecular Genetics I & II (Major Electives)

**Undergraduate**

BZT 202: Cell Biology  
 BZT 301: Chordates  
 BZT 401: Genetics  
 BZT 402: Evolution and Biostatistics  
 BZT 501: Comparative Anatomy of Chordates  
 BZT 602: Molecular Biology and Genetic Engineering  
 BZT 604: Animal Biotechnology

**Mahatma Gandhi Central University, Motihari, Bihar****Postgraduate**

ZOOL 4002: Biosystematics and Biostatistics

**Undergraduate**

ZOOL 3002: Principles of Ecology

ZOOL 3003: Non-chordates II: Coelomates

ZOOL 3005: Diversity of Chordates

ZOOL 3008: Comparative Anatomy of Vertebrates

ZOOL 3012: Principles of Genetics

ZOOL 3014: Evolutionary Biology

ZOOL 3015: Environment and Public Health

ZOOL 3016: Insect, Vector and Disease

ZOOL 3017: Food, Nutrition and Health

**7. RESEARCH SUPERVISION:****A. Ph.D.:**

i. Awarded	:	01 (One)
ii. Submitted	:	Nil
iii. Ongoing	:	01 (One)

**B. M.Phil.: Nil**

i. Awarded	:	
ii. Submitted	:	
iii. Ongoing	:	

**C. Non-Degree Oriented (Master's Level Dissertation):**

i. Awarded	:	Nil
ii. Submitted	:	
iii. Ongoing	:	

**8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:**

- Convener, Diary and Calendar committee
- Convener, to draft proposal for new departments and center
- Convener, Invitation, Reception and Hospitality committee for Champaran Satyagrah Centenary Celebrations
- Convener, Hospitality committee for University foundation day Celebrations Member, Draft Ordinance for Examination
- Resource Person, Two day workshop on “Transacting students’ Engagement for promoting Rural Resilience”
- Resource Person, Two day workshop on “Entrepreneurship Development”
- Chairman, Brochure Committee
- Chairman, Rate Contract Committee
- Member, Draft Ordinance for Financial Assistance for National and International travel
- Member, Library committee
- Member, Advisory committee for finalization of Prospectus (2017-18)
- Member, Antiragging committee
- Member, Purchase committee
- Member, Canteen Committee
- As a Dean, School of Life Sciences, MoU with NRC Litchi Muzaffarpur; Dept. of Animal Husbandry, Dairying and Fisheries, Govt. of Bihar; Central Institute of Fisheries Education (CIFE), Mumbai; Working on the draft MoU of National Dairy Development Board (NDDB)
- Chairman, Board of Studies, Biotech & Botany (2017)
- Chairman, Board of Studies, Zoology
- Member, School Board, School of Life Sciences

**9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES:**

- All India Cell Biology Society (AICBS)
- Asia-Pacific Chemical Biology and Environmental Engineering Society (APCBEEES)

**10. PUBLICATIONS:****A. BOOKS/MONOGRAPHS:****1. Authored:**

- i. Pranveer Singh (2014). Surface Plasmon Resonance. Nova Science Publishers, New York, USA (ISBN: 978-1-63321-835-2)
- ii. Pranveer Singh (2015). Evolutionary and Population Genetics of *Drosophila ananassae*. Springer (978-81-322-2564-5)

- iii. Pranveer Singh (2017). Surface Plasmon Resonance: A boon for viral diagnostics. Reference Module in Life Sciences, Elsevier, Netherlands. DOI: [10.1016/B978-0-12-809633-8.12245-9](https://doi.org/10.1016/B978-0-12-809633-8.12245-9) (Book Chapter)
- iv. Pranveer Singh. (2015). Book Chapter: Efficacy of Mushrooms in Environment friendly Electronic waste Disposal. In: Production techniques of Tropical Mushrooms. Thakur MK & Thakur T (Eds.), Shree Publications, New Delhi, India. (Book Chapter)

## 2. Edited:

- i. Pranveer Singh (2019). Tuberculosis and Co-infection with HIV/AIDS: Its History, Cause and Spread, Cambridge Scholars, New Castle, United Kingdom (9-781527-539624)

## B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

### 2019

1. Pranveer Singh (2019). Diagnosis of TB: From conventional to modern molecular protocols. **Frontier in Biosciences, Elite**, 11:38-60.

**Impact factor- 2.349**

### 2018

1. Mansi Purwar, Jonathan K Pokorski, Pranveer Singh, Sanchari Bhattacharya, Heather Arendt, Joanne DeStefano, Celia C. La Branche, David C Montefiori, MG Finn, Raghavan Varadarajan (2018). Design, display and immunogenicity of HIV 1gp120 fragement immunogens on viruls like particles. **Vaccine**, 42: 6345-6353.

**Impact factor- 3.285**

2. Ram Sewak Kachhi, Vikas K. Saket, Poonam Sharma, Pranveer Singh (2018). Treatment of Tuberculosis using Ethno-medicinal plants of Amarkantak Region. **Asian Journal of Animal and Veterinary advances**, 13:52-60.

**Impact factor- 0.8**

3. Pranveer Singh (2018). Surface plasmon resonance (SPR) based binding studies of refolded single chain antibody fragments. **Biochemistry and Biophysics Report**, 14:83-88.
4. Kachhi R, Saket V, Sharma P, Singh P\* (2018) Epidemiological Study of TB as Major HIV-AIDS Co-Infection. **J Math Stat Anal**, 1: 103

**2017**

5. Pranveer Singh (2017). G Protein coupled receptors: A potential candidate for drug discovery. **International Journal of Pharmacology (Special Issue), 13:846-863.**  
**Impact factor- 1.8**

6. Vikas K. Saket, Ram Sewak Kachhi, Pranveer Singh (2017). Tuberculosis in Humans and Animals: Evolution of diagnostics and therapy. **Asian Journal of Animal and Veterinary advances, 12:177-188.**

**Impact factor- 0.8**

**2016**

7. Pranveer Singh (2016). LSPR Biosensing: Recent advances and approaches. **Reviews in Plasmonics 2016**, Eds. Chris D Giddes, 211-238.

8. Pranveer Singh (2016). SPR Biosensors: Historical perspectives and Current Challenges. **Sensors & Actuators: B. Chemical 229, 110-130**

**Impact factor- 6.393**

**2013**

9. Pranveer Singh, Likhesh Sharma, S. Rajendra Kulothungan, Bharat V.Adkar, Ravindra Singh Prajapati, P. Shaik Syed Ali, Beena Krishnan, RaghavanVaradarajan (2013). Effect of signal peptide on stability and folding of *E.coli* thioredoxin. **PLOS One, 8: e63442**

**Impact factor- 2.766**

10. Sanchari Bhattacharyya, Pranveer Singh, Ujjwal Rathore, Mansi Purwar, Denise Wagner, Heather Arendt, Joanne DeStefano, Celia C. LaBranche, David C. Montefiori, Sanjay Phogat, Raghavan Varadarajan (2013). Design of an *E. coli* expressed HIV-1 gp120 fragment immunogen that binds to b12 and induces broad and potent neutralizing antibodies. **Journal of Biological Chemistry, 288 : 9815-25**

**Impact factor- 4.010**

**2012**

11. Saurabh Gautam, Priyanka Dubey, Pranveer Singh, S. Kesavardhana, Raghavan Varadarajan, Munishwar N. Gupta 2012. Smart Polymer Mediated Purification and Recovery of Active Proteins from Inclusion Bodies **Journal of Chromatography A, 1235 : 10-25**

**Impact factor- 4.169**

12. Saurabh Gautam, Priyanka Dubey, Pranveer Singh, Raghavan Varadarajan, Munishwar N. Gupta 2012. Simultaneous Refolding and Purification of Recombinant Proteins by Macro-(Affinity Ligand) Facilitated Three-Phase Partitioning (MLFTPP). **Analytical Biochemistry, 430 : 56-64**

**Impact Factor - 2.275**

**2010**

13. Singh, P. and B.N. Singh 2010. Population Genetics of *Drosophila ananassae* : Chromosomal association studies in Indian populations. **Genetika** 42: 210-222.

**Impact factor : 0.392**

14. Singh, P. and B.N. Singh 2010. Population genetics of *Drosophila ananassae*: Evidence for population sub-structuring at the level of inversion polymorphism in Indian natural populations. **International Journal of Biology**. 2 : 19-28.

**2008**

15. Singh, P. and B.N. Singh 2008. Population genetics of *Drosophila ananassae*: Variation in the degree of genetic divergence in populations transferred to laboratory conditions. **Zool. Stud.** 47: 704- 712.

**Impact factor : 1.054**

**2007**

16. Singh, P. and B.N. Singh 2008. Population genetics of *Drosophila ananassae*. **Genet. Res.** 90 : 409-419.

**Impact factor : 1.059**

17. Singh, P. and B.N. Singh 2007. Population genetics of *Drosophila ananassae*: Genetic differentiation among Indian natural populations at the level of inversion polymorphism. **Genetics Research**, 89: 191-199.

**Impact factor : 1.059**

18. Singh, P. and B.N. Singh 2007. Loss of paracentric inversions in laboratory populations of *Drosophila ananassae*. **Dros. Inf. Serv.** 90: 26-28.

19. Singh, P. and B.N. Singh 2007. Chromosomal aberrations in *Drosophila ananassae*. **Dros. Inf. Serv.** 90: 49-54.

**2005**

20. Singh, P. and B.N. Singh 2005. A new paracentric inversion in the left arm of the third chromosome in *Drosophila ananassae*. **Dros. Inf. Serv.** 88: 10-11.

21. Singh, P. and B.N. Singh 2005. A new inversion in *Drosophila ananassae* from Allahabad, Uttar Pradesh. **Dros. Inf. Serv.** 88: 16-17.

**2004**

22. Singh, P. and B.N. Singh 2004. Genetic differentiation among laboratory populations of *Drosophila ananassae* established from naturally impregnated females. **Proc. Zool. Soc. Kol.** 57: 105-112 (Springer)

**C. PAPERS IN CONFERENCES PROCEEDINGS:**

- i. Pranveer Singh 2015. Study of Signal peptide mediated Folding unfolding Kinetics of *Escherchia coli Thioredoxin*. International Journal of Pharmacology and Biological Sciences 9: 161-168.
- ii. Pranveer Singh 2014. Animal vivisection in Life Science, a shift in paradigm. Conference Proceedings. 19-26.
- iii. Singh, P. and B.N. Singh 2007. Inversion polymorphism in Indian natural populations *Drosophila ananassae*. **30<sup>th</sup> All India Cell Biol.Conf. P.81. 1.**
- iv. Singh, P. and B.N. Singh 2007. Evidence for population sub-structuring and minimal gene flow in Indian natural populations. **31<sup>st</sup> All India Cell Biol.Conf. , Dec 14-16, 2007, P.32.**

**11. Patents/Copyrights /IPR (If Any)****12. INVITED TALKS:**

1. HIV to AIDS: A threat to human race. 26<sup>th</sup> Orientation program, UGC-HRDC, Guru Ghasidas University, November 27, 2019, Bilaspur, Chhattisgarh.
2. Genetic diseases. 26<sup>th</sup> Orientation program, UGC-HRDC, Guru Ghasidas University, November 27, 2019, Bilaspur, Chhattisgarh.
3. Viral diseases: Threat of Poliomyelitis and Hepatitis. 26<sup>th</sup> Orientation program, UGC-HRDC, Guru Ghasidas University, November 27, 2019, Bilaspur, Chhattisgarh.
4. Recombinant subunit vaccine design for HIV-AIDS. Amity Institute of Biotechnology, Gwalior, October 14, 2019, Madhya Pradesh.
5. Public health and rural India. Workshop on Transacting student's engagement for promoting rural resilience, Mahatma Gandhi Central University, Motihari, Bihar, 22-23 March, 2017.
6. Stability analysis of Signal peptide mutants. Society for Industrial and Applied Mathematics (SIAM) Conference of Life Science, July 10-15, 2016, Boston, USA.
7. Environment and Human Health. UGC Sponsored National Conference on Environmental issues. Mahapatelashwar Government Degree College, Masturi, Bilapur, December 02, 2015.
8. AIDS Awareness Lecture on World AIDS day. Kalayanika Sikshan Sansthan, Amarkantak, December 02, 2015.

9. Folding Unfolding Kinetics: Implications with *Sec* mediated translocation and kinetic partitioning. International conference on Translational medicine. Barkatullah University, Bhopal, April, 11-14, 2015.
10. Signal peptide mediated folding-unfolding kinetics of *Escherichia coli Thioredoxin*. Prospects of life science for human welfare with special reference to Chhattisgarh & First Chhattisgarh congress of ZSC. Government V.Y.T. PG. Autonomous College, Durg, Chhattisgarh, February 7-8, 2015.
11. Proteomics / Biophysical Approaches in AIDS Vaccine Design. Government V.Y.T. PG. Autonomous College, Durg, Chhattisgarh, September 27, 2014.
12. Animal Vivisection in Life Science: A shift in Paradigm. C.M.D. P.G. College, Bilaspur, Jan 12, 2014
13. 'Signal Peptide and Protein Targeting' at Dept of Zoology, Mahila Mahavidyalaya, Banaras Hindu University (BHU), Varanasi (UP) under 'Star College Scheme of Dept of Biotechnology, Ministry of Science and Technology on February 06, 2013.
14. "HIV to AIDS" organised by 'Sci-Forum' Dept of Organic Chemistry, Indian Institute of Science (IISc), Bangalore, January 29, 2009.
15. Volunteered Lectures / Awareness classes for Senior students in Central School, IISc, Bangalore Campus.

#### 16. RESEARCH PROJECTS (COMPLETED / ONGOING):

##### DST-NRDMS (Rs. 18.32 Lakhs) (Ongoing)

"Epidemiological methods to control TB and associated morbidities in Madhya Pradesh"

##### UGC Startup Grant (Completed)

"Tuberculosis in Tribal Populations of Madhya Pradesh: Epidemiological Survey of Medico-Socio-Economic factors and its association with HIV-AIDS"

#### 17. PARTICIPATION & PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

1. Refresher Course in Environment, Forestry and Disaster Management. Guru Ghasidas University Bilaspur, Chhattisgarh. January 21-February 11, 2016.
2. Program on Mathematical Biology. National Network for Computational and Mathematical Biology (NNCMB) & Jawaharlal Nehru Center for Advanced Scientific Research (JNCASR), Bangalore. September 7-11, 2015.
3. 'Advances in Mathematical Biology', Pacific Institute of Mathematical Sciences (PIMS), Canada, International Center for Theoretical Sciences (ICTS), TIFR, Mumbai, Indian Institute

of Science and Education Research (IISER), Pune, December 07- 16, 2014.

4. Orientation Course at Guru Ghasidas University Bilaspur, Chhattisgarh, November 10- December 06, 2014.
5. International Conference on “Functional Genomics: Future and Prospects”, Banaras Hindu University, Varanasi, October 2-4, 2010.
6. International workshop on ‘Discovery to Diversity’, organized by Southwest Federation of Biomedical Research (SFBR), USA, International school of Anthropology & Anthropological Survey of India. February 15-28, 2008.
7. Singh, P. and B.N. Singh 2007. Evidence of population sub-structuring and gene flow in Indian natural populations of *Drosophila ananassae*. 31st All India Cell Biol.Conf.
8. International symposium on “ Environmental factors, cellular stress and evolution”, Banaras Hindu University, Varanasi, October 13-15, 2006.
9. Symposium on “ Molecular approaches in Cytogenetics”, University of Allahabad, Allahabad, October 20-22, 2005.

#### 18. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

- a. DST-SERB International Travel support for USA
- b. International AIDS Vaccine initiative (IAVI), USA Postdoctoral fellowship
- c. UGC DS Kothari Postdoctoral Fellow
- d. DBT Postdoctoral Fellow (Research Associate)
- e. CSIR-Research Associate (CSIR-RA / Extended SRF)
- f. CSIR-SRF
- g. CSIR-JRF

#### 19. ANY OTHER SIGNIFICANT INFORMATION:

- Member, Board of Studies, Department of Biochemistry and Genetics, Barkatullah University, Bhopal, MP.
- Member, Board of Studies, Department of Zoology and Applied Aquaculture, Barkatullah University, Bhopal, MP.

- Science Education Park (under conception), as a member of Planning Board, Indira Gandhi National Tribal University (IGNTU), Amarkantak (MP) coordinating the design and establishment of Science park in its exhaustive details having exhibits and working models from natural science
- Interactive session for Science propagation and dissemination (Two days workshop) to address the challenges of rapidly advancing science and communicating the scientific endeavours in its most lucid and comprehensible form
- A workshop on Bioinformatics for the UG/PG students
- Two days Motivational lecture series for undergraduate and postgraduate students of IGNTU
- Engaging **British Council of India** to improve the writing and communication skills of students
- Assisted thrice in parliamentary and assembly election process of government of India as Micro-observer.

Pranveer Singh

***(Name of Faculty)***