

# At present:

Working as Assistant Professor at Centre for Bioinformatics, M.D.U., Rohtak, since 19/09/2013.

## Experience:

Proof attached at Annexure 'A'

Worked as Research Associate at Centre for Biotechnology, M.D.U. Rohtak from 8 April, 2013 to 19 Sep, 2013. (Awarded UGC-BSR Scholarship)

Worked as Assistant Professor (Bioinformatics) from 23 Aug, 2011 to 7 May, 2012 in Department of Biochemistry, Kurukshetra University Kurukshetra.

Worked as Assistant Professor (Bioinformatics) from 20 Sep, 2010 to 30 April, 2011 in Department of Biochemistry, Kurukshetra University Kurukshetra.

## **Educational Qualification:**

Exam Passes	University/ Board	Year of Passing	Percentage of marks obtained	Division	Date of Award of Degree	Subject studied including options
Metric	CBSE	2002	76.6%	First	28-05-2002	Hindi, English, Math, Science Social Science
10+2	CBSE	2004	73.4%	First	23-05-2004	Physics, Chem, Biology, Hindi, English
B.Sc. Medical	Panjab University, Chandigarh	2007	72.3%	First	26-06-2007	Chemistry, Botany, Zoology, Eng
M.Sc. Bioinfor matics	Banasthali University	2009	73.7%	First	16-01-2010	Subjects related to Bioinformatics
Pre. Ph.D	M.D. University, Rohtak	2013	58%		07-05-2013	Computational and System Bio, Research Methodology and

					Trends in biotechnology
Ph. D.	M.D. University, Rohtak	2017		19-09-2017	Subject: Biotechnology  Title of Thesis: "IN-SILICO CHARACTERIZ ATION AND VALIDATION OF ASPERGILLUS FUMIGATUS ALLERGENS AS PROTECTIVE MOLECULES" Chief Supervisor: Prof. Anil Kumar Chhillar
Any other exam			C NET exam held i		

## Number of Ph. D. students guided:

04 students are pursuing Ph.D. under my guidance (Year: 2021)

## Post graduate students guided so far:

49 students have successfully completed their dissertations under my guidance till the year 2018.

## Workshops/ Seminars/ Training and other related information:

Attended "One day Workshop for Affiliated Colleges of MDU" conducted by IQAC, MDU on 30/Nov/2018.

Attended "International Workshop on Intellectual Property Rights" conducted by Centre for Medical Biotechnology and IPR Cell, MDU on 11<sup>th</sup> Feb 2019.

Attended workshop on Wildlife ecology and Seribioresources organized by Directorate of Sericulture, BTC; College of veterinary science, Khanapara and Association for the promotion of DNA fingerprinting and other DNA technologies held from 30 Jan to 01 Feb, 2018

Attended one day National conference-cum-workshop on Emerging Infectious Diseases conducted by Biotechnology Department, MDU on 29 Nov 2017.

Attended National seminar on Advances in Virology on 28 Sep 2017 conducted by CMBT, MDU.

Attended workshop on Save ozone layer organized by Environment Science Department, MDU on 16/Sep/2016

Attended National Research Colloquium MFEE-2016 conducted by Microbiology Department on 2/April 2016

Participated in 2 days workshop on In-silico Drug Discovery by BioDiscovery Group 20-21 Sep 2014

Participated in Symposium on "Current Trends in Bioinformatics" organized by Bioinformatics Centre, CSIR-IMTECH

Participated Conference/Seminar on Molecular Pathology of Human Genetic Diseases held on 23<sup>rd</sup> Aug 2014 in Genetics

Attended 3<sup>rd</sup> International Research Colloquium on Interdisciplinary Scope of Microbiology: IRCISM 2015, held on 31<sup>st</sup> January, 2015 by Department of Microbiology, M.D. University, Rohtak.

Attended National Workshop on Bioinformatics, organized by Centre for Biotechnology, Maharshi Dayanand University, Rohtak. (2010)

Done 6 month dissertation at National Dairy Research Institute, under the guidance of Dr. S.K. Sood, Sr. Scientist, Animal Biochemistry Division, NDRI, Karnal, Haryana, India (2009).

**Topic**: "Development of an ANN-QSAR model to predict the activity of a bacteriocin from its structure".

Done the project in a team of 4 at Banasthali University during M.Sc. Bioinformatics (3<sup>rd</sup> sem) under the guidance of Asheesh Shanker, Sr. Lecturer (Bioinformatics), Banasthali University, Rajasthan (2008).

**Topic**: "Evolutionary Relationship of Plants Using Sequenced Chloroplast Genomes".

1 month project training at IBI BIOSOLUTION Panchkula, Haryana (2008), India.

**Topic**: "In-silico DRUG DESIGNING for Diabetes Mellitus".

Attended the International conference on Molecular Biology and Biotechnology (ICMBB-

2008) organized by Banasthali University, Rajasthan, India.

Participated in International Computer Fair and Seminar (COFAS) held at Lucknow (2003),

Uttar Pradesh, India.

## REFRESHER COURSES AND ORIENTATION COURSES

S.No.	Course	Duration	Organized by
1.	Orientation Course	four weeks	UGC- Academic Staff College, H.P. University, Shimla (H.P.) from 02.06.14 - 28.06.14
2.	Refresher Course	three weeks	UGC- HRDC Jai Narayan VyasUniversity, Jodhpur from 03.02.17 - 22.02.17.
3.	Workshop on Open Source Alternatives in Engineering Studies	6 days	School of Engineering, GD Goenka University from 6 <sup>th</sup> to 11 <sup>th</sup> July 2015

Title of the professional development programme	Date and Duration
Short Term Course/FDP on Cyber Safety, Cyber Crime and Cyber Law	10-02-2020 to 16-02- 2020
Organized by UGC-HRDC, PU, Chandigarh	
FDP on MOOCs and E learning Technologies (Online Mode)	10-04-2020 to 15-04- 2020
Organized by FDC, MDU, Rohtak, Haryana	
10 Days Instructor Led Live Online FDP on Artificial Intelligence and Machine Learning Using Python	28-05-2020 to 06-06- 2020
Organized by Finland Labs in Association with IIT Roorkee	
Refresher Course in Data Analytics and Machine Learning	23-02-2021 to 08-03- 2021
Organized by: UGC-HRDC, University of Kerela, Trivandrum, Kerela	

# Publications

- 1. **M. Dangi**, B. Singh, A. K. Chhillar. Reverse Vaccinology: An Epitope Based Approach to Design Vaccines. *Current Bioinformatics*, 11(5) (2016) 537-550.
- 2. **M. Dangi**, B. Singh, A. K. Chhillar. Reverse Vaccinology to Computationally Screen Antigenic Epitopes as Potential Vaccine Candidates from Clostridium botulinum Strain Hall A. *Current Bioinformatics*, 12(4) (2017) 349-360.
- 3. M. <u>Dangi</u>, B. <u>Singh</u>, S. K. <u>Dhanda</u>, R. <u>Chaudhary</u>, <u>A. K. Chhillar</u>. Comprehensive Analysis and Annotation of Available Fungal Allergens for the Presence of T-cell and B-cell epitopes and Development of the SVM Based Classifiers for in silico

- Prediction of Novel Allergen Sequences. *Anti Infective Agents*, 15(2) (2017) 87-94.
- 4. N. Phougat, **M. Dangi** and A. K. Chhillar. Antibacterial, antioxidant, chemical constituents and cytotoxicity evaluation of Terminalia arjuna (Roxb. ex DC.) Wight &Arn. *Asian J Pharm Clin Res*, 10 (2017)1-6.
- 5. R. Chaudhary, M. Balhara, D. Jangir, M. Dangi, M. Dangi, S. Khatri, A. K. Chhillar. The Sesamum indicum Rhizosphere Associated Bacterium: A Source of AntifungalCompound. *Current Topics in Medicinal Chemistry*, 18(1) (2018) 88-97.
- 6. R. Chaudhary, M. Balhara, M. Dangi, M. Dangi, A. K. Chhillar. Rhizosphere microbiome: An emerging frontier in causing and curing infectious diseases. *Asian Journal of Pharmaceutical and clinical research*, 11 (2018) 65-69.
- 7. R. Bhatnager, **M. Dangi**, A. S. Dang. Comprehensive analysis of damage-associated single-nucleotide polymorphisms of sex hormone-binding globulin gene. *Journal of Applied Biology & Biotechnology*, 6(05) (**2018**) 1-11.
- 8. P. Narang<sup>#</sup>, M. Dangi<sup>#</sup>, D. Sharma, A. Khichi, A.K. Chhillar. An Integrated Chikungunya Virus Database to Facilitate Therapeutic Analysis: ChkVDb. *Current Bioinformatics*, 14 (2019) 323-332. #Both authors contributed equally
- **9.** R. <u>Chaudhary</u>, M. <u>Balhara</u>, D. K. <u>Jangir</u>, M. <u>Dangi</u>, M. <u>Dangi</u>, A. K. <u>Chhillar</u>. In Silico Protein Interaction Network Analysis of Virulence Proteins Associated with Invasive Aspergillosis for Drug Discovery. <u>Curr Top Med Chem.</u> 19(2) (2019) 146-155.
- M Dangi, A Khichi, R Jakhar, AK Chhilar. Growing Preferences towards
   Analog-based Drug Discovery. Current Pharmaceutical Biotechnology (2020)
   https://doi.org/10.2174/1389201021666200908121409
- 11. R Jakhar, **M Dangi**, A Khichi, AK Chhillar. Relevance of Molecular Docking Studies in Drug Designing. *Current Bioinformatics* 15 (4), (2020) 270-278
- 12. S Ahlawat, R Chaudhary, M Dangi, K Bala, M Singh, AK Chhillar. S Ahlawat, R Chaudhary, **M Dangi**, K Bala, M Singh, AK Chhillar. <u>Advances in tuberculous meningitis diagnosis</u>. *Expert Review of Molecular Diagnostics* 20 (12) (2020) 1229-1241
- 13. Namita Sharma, Anil Kumar Chhillar, Sweety Dahiya, Aruna Punia, Pooja Choudhary, Prity Gulia, Akanksha Behl, **Mehak Dangi**. Chemotherapeutic

## BOOK CHAPTERS:

- 1. Sweety Dahiya, Aruna Punia, Pooja Choudhary, Namita Sharma, Meenakshi Balhara, **Mehak Dangi**, Anil Kumar Chhillar. Publisher: *CRC Press*. Name of Book: Advances in Animal Disease Diagnosis. Chapter: Diagnostic Tools for the Identification of Footand-Mouth Disease Virus (193-203). Edited By: Suresh Kumar Gahlawat, Sushila Maan (2021). eBook ISBN: 9781003080282
- Pooja Choudhary, Aruna Punia, Sweety Dahiya, Namita Sharma, Meenakshi Balhara, Mehak Dangi, Anil Kumar Chhillar. Publisher: CRC Press. Name of Book: Advances in Animal Disease Diagnosis. Chapter: Recent Trends in Diagnosis of Campylobacter Infection (219-228) Edited By: Suresh Kumar Gahlawat, Sushila Maan (2021). eBook ISBN: 9781003080282
- 3. Aruna Punia, Pooja Choudhary, Sweety Dahiya, Namita Sharma, Meenakshi Balhara, **Mehak Dangi**, Anil Kumar Chhillar. Publisher: *CRC Press*. Name of Book: Advances in Animal Disease Diagnosis. Chapter: Current Diagnostic Techniques for Influenza (181-191). Edited By: Suresh Kumar Gahlawat, Sushila Maan (2021). eBook ISBN: 9781003080282
- 4. **M. Dangi**, R. Jakhar, S. Deswal and A. K. Chhillar. Publisher: *Springer*. Name of book: Nutritional Quality Improvement in Plants. Chapter 16: Role and Applications of Bioinformatics in Improvement of Nutritional Quality and Yield of Crops Editors: Jaiwal, P.K., Chhillar, A.K., Chaudhary, D., Jaiwal, R. (Eds.) (2019) ISBN: 978-3-319-95353-3
- **5. M. Dangi**, R. Kumari, B. Singh, A. K., Chhillar. Publisher: *Springer*. Name of book: Bioinformatics: Sequences, Structures, Phylogeny, Editor: Asheesh Shanker CHAPTER No. 15: Advanced in-silico tools for designing of antigenic epitope as potential vaccine candidates against Corona virus. (2018) ISBN: 978-981-13-1562-6

# CONTRIBUTION TO DEPARTMEMTAL ACTIVITIES

#### 2014-18

Tour InchargeEducational tour of (MSc. Pre and Final ) students to

Dhanchauli from 5 Feb to 9 Feb 2014.

Coordinator of Talent Hunt Contest held on 27/Sep/2013 in CBINF.

Member of Admission Committee during 2014-15, 2015-16, 2016-17,

2017-18 admissions.

Member of Organizing Committee of National Workshop held from 13 to 14<sup>th</sup> Dec 2013.

Organizing secretary of National Workshop held on 29<sup>th</sup> March 2014.

Member of inspection committee for Laxmi College of Education,

Sidhrawali Gurgaon.

Member of inspection committee for Rao Mool Chand College of Education Mohindergarh.

Tour Incharge Educational tour of (MSc. Pre and Final ) students to

Dhanchauli from 1 Oct 2015 to 5 OCT 2015

Member of Selection Committee for Research Personnel in DBT-BIF (2014-2015)

Member of Departmental purchase committee since 2014.

Judge for Declamation Competition in Zoology Department held on 5/10/2015

IQAC officer of Department since 2015 and onwards.

Member of Departmental purchase committee (2015-2016)

Time Table incharge since 2015.

Member of PG board of studies in Bioinformatics since 2015.

Tour Incharge of Educational tour of (MSc. Pre and Final ) students to

Manali from 13 Oct 2016 to 18 OCT 2016.

Co-chair Poster Making Competition in Centre for Biotechnology held on 14/09/2017

Member of Organizing Committee of National Conference cum Workshop held from 7 to 8<sup>th</sup> Nov 2016

Member of PG board of studies in Bioinformatics (2016-2017)

Member of Faculty of Life Sciences (2016-2017)

Member of Alumni Association (2016-2017)

Participated in All India Survey on Higher Education (17/March/2017)

Judge for Poster making Competition in Environment Sustainability

Management Cell, MDU held on 06/02/2018

Event organizer in Bioinfo fest-2018 held on 15<sup>th</sup> to 17<sup>th</sup> March, 2018 in CBINF, MDU.

Member of organizing committee for National conference on Recent Advancements in Bioinformatics held during Bioinfo fest 2018.

#### 2018-19

- 1. Member PGBOS (CBINF)
- 2. Member of Faculty of Life Science 2019
- 3. IQAC officer for the session 2018-19.
- 4. Time table Incharge (odd semester)

- 5. Member of the M.Sc. and Ph.D. admission committee (2018-19)
- **6.** Member of Departmental purchase committee
- 7. Departmental Coordinator CCPC
- 8. Department Alumni Coordinator
- 9. Departmental Examination Incharge
- 10. Member of Alumni Association
- 11. Member of Anti Ragging Committee
- 12. Member of Anti Sexual Harassment Committee
- 13. Member of Grievances Redressal Committee
- 14. Member of the Scrutiny Committee for the CR elections Oct 2018
- 15. Member of the Inspection Committee for the J. R. Kissan College of Education

# ORGANIZING SECRETARY of the BIOINFO FEST 2019 organized by CBINF, MDU (07-09 March 2019)

Compiled 7 NAAC criterions of the CBINF for preparation of NAAC self study Report of MDU (NAAC 2019)

Delivered an Expert Lecture in Biotechnology Engineering, UIET, MDU on "Introduction to Phylogenetic Analysis" for B.Tech and M.Tech. students of the department. (11/04/2019)

Organizer of the Online Lecture in CBINF on "Bioinformatics: A new era of Life Sciences" by Dr. Sandeep Dhanda on 28/Aug/2018.

Member of Inauguration and Stage Committee of "3 days workshop on Entreprenurship Awareness Camp" conducted by MDU and HVSU in Conference Hall, Swaraj Sadan (19 to 21 Sep 2018)

Session Coordinator Day 3 Session I of "3 days workshop on Entreprenurship Awareness Camp" conducted by MDU and HVSU in

Conference Hall, Swaraj Sadan (19 to 21 Sep 2018)

Member of Local Organizing Committee of "National Conference on Global Climate Change: Concerns and Solutions" organized by ESM Cell MDU. (15-16 Feb, 2019)

Judged Poster Making Contest in CMBT on 4th Feb 2019.

## Personal Details:

Date of birth: Jan 28<sup>th</sup>, 1987

**Gender:** Female **Status:** Married **Nationality:** Indian

Mehak Dangi Assistant Professor Centre for Bioinformatics Maharshi Dayanand University