

CHANDRA DEV PATI TRIPATHI, Ph.D

National Post-Doctoral Fellow

Department of Microbiology
Central University of Punjab

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POSITIONS HELD

National Post-Doctoral Fellow (12.04.2018 –continuing): SERB-Department of Science and Technology sponsored research project entitled “Extensive analysis of Interferons (IFNs) Induced GTPases p-65 guanylate binding proteins Involved in host cell autonomous immunity” at Centre for Biochemistry and Microbial Sciences, Central University of Punjab, Bathinda (Punjab), India.

Scientist B (22.04.2013 – 28.02.2016): Indian Council of Medical Research (ICMR) sponsored research project entitled “Diagnosis and Epidemiology of Rickettsial Infections” at Department of Microbiology, King George’s Medical University, Lucknow (U.P.) India.

Project Fellow (01.06.2010- 31.03.2013): Council of Scientific and Industrial Research (CSIR) sponsored research project entitled “Leads based drug development and genetic improvement of Ashwagandha (*Withania somnifera*) at Division of Parasitology, Central Drug Research Institute, Lucknow (U.P.) India.

ACADEMIC QUALIFICATIONS

Ph.D. (Microbiology) – (2017)

Thesis title – “**Epidemiological studies of Rickettsial infections in the state of Uttar Pradesh**”

Institute – King George’s Medical University, Lucknow, U.P. (India)

Supervisor – Dr. Mastan Singh, Ex-Professor & Head

M.Sc. (Microbiology) - (2008) 1st Division

Department of Microbiology

Dr. Ram Manohar Lohia Avadh University, Faizabad, Uttar Pradesh, India.

This course covered principles and applications of microbiology and biotechnology in the field of immunology, medical, mycology, genetics & genetic engineering, food & dairy, environmental and industries. I also learned about the general and medical bacteriology, microbial metabolism, physiology and parasitology.

Summer Training: Hands on experience on various molecular and immunological techniques *viz* Isolation of genomic DNA, plasmid isolation, PCR, SDS-PAGE, Agarose gel electrophoresis, Western blotting, Immunoelectrophoresis, Immunohistochemistry, ELISA etc.

Duration: 90 Days (1stMay-31stJuly 2007)

Guide: Dr. Anant Narayan Bhatt (Scientist), Division of Radiation Biosciences, Institute of Nuclear Medicine and Allied Sciences (INMAS), DRDO, New Delhi

B.Sc. (Zoology, Botany, Chemistry) - (2003) 1st Division

Pt. Deen Dayal Upadhyaya Gorakhpur University. Gorakhpur, Uttar Pradesh, India.

In addition to a comprehensive study program this course included all aspects of Botany, Chemistry and Zoology that are of important to all fields.

ACHIEVEMENTS AND AWARDS

- ❖ Awarded **National Postdoctoral Fellowship (NPDF)** from DST-SERB in October 2017.
- ❖ Qualified **National Eligibility Test (NET)** 2017 in Agriculture Microbiology conducted by ICAR-ASRB.
- ❖ Qualified Graduate Aptitude Test in Engineering (**GATE**) 2010 & 2012 in Life Sciences, conducted by IITs
- ❖ Awarded **Senior Research Fellowship (SRF)** from ICMR, New Delhi in December 2013.
- ❖ Awarded **Senior Research Fellowship (SRF)** from CSIR, New Delhi in August 2014.
- ❖ Qualified Uttar Pradesh Common Eligibility Test -2013 conducted by Dr. Ram Manohar Lohia Awadh University, Faizabad, U.P., India
- ❖ Received **International Travel Support Award** from Department of Science and Technology (DST), New Delhi in the year **2015**.
- ❖ Awarded **International Travel Grant** from Indian Council of Medical Research (ICMR), New

Delhi in the year 2015.

- ❖ Received **International Travel Bursary** from **Immunology Foundation**, New Delhi in the year 2015.
- ❖ Received **International Travel Support Award** from Centre for International Co- operation in Science (CICS), Chennai 2015.
- ❖ Qualified **Course on Computer Concepts (ccc)** examination conducted by **National Institute of Electronics and Information Technology (NIELIT)** in the year 2018.

RESEARCH PUBLICATIONS

1. **Chandra Dev Pati Tripathi**, Mastan Singh, Jyotsna Agarwal, Chandra Kanta, Virendra Atam. Seroepidemiology of Spotted fever rickettsiosis in Uttar Pradesh - a prospective study, *Journal of Clinical & Diagnostic Research*, 2017 Jun, Vol-11(6): DC04-DC09.
2. **Chandra Dev Pati Tripathi**, Mastan Singh, Jyotsna Agarwal, Raj Kumar Kalyan, Chandra Kanta, Virendra Atam. Scrub typhus in Uttar Pradesh, India- a prospective study, *International Journal of Current Microbiology & Applied Sciences*, 2017, 6, 977-986.
3. **Chandra Dev Pati Tripathi**, Pramod Kumar Kushawaha, Chitra Mandal, Shailja Misra Bhattacharya, Anuradha Dube. Withania somnifera chemotype NMITLI 101R significantly augments the antileishmanial efficacy of Miltefosine, Paromomycin & Amphotericin B by generating strong IFN- γ & IL-12 responses in Leishmania donovani infected hamsters, *Phytomedicine*, 24 (2017) 87–95.
4. **Chandra Dev Pati Tripathi**, Reema Gupta, Pramod Kumar Kushawaha, Chitra Mandal, Shailja Misra Bhattacharya, Anuradha Dube. Efficacy of Withania somnifera chemotypes NMITLI 101R, 118R against experimental visceral leishmaniasis, *Parasite Immunology*, 2014, 36, 253–265 DOI: 10.1111/pim.12112.
5. Mastan Singh, Jyotsna Agarwal, **Chandra Dev Pati Tripathi**, Chandra Kanta. Spotted fever rickettsiosis in Uttar Pradesh, *Indian J Med Res* 141, February 2015, pp 242-244.
6. Pramod K. Kushawaha, Reema Gupta, **Chandra Dev Pati Tripathi**, Shyam Sundar, Anuradha Dube. Evaluation of Leishmania donovani Protein disulfide isomerase as a potential immunogenic protein / vaccine candidate against visceral leishmaniasis, *Plos-one* April 2012 | Volume 7 | Issue 4 | e35670.

7. Reema Gupta, Pramod K Kushawaha, **Chandra Dev Pati Tripathi**, Shyam Sundar, and Anuradha Dube (2012). A novel recombinant *Leishmania donovani* p45- a partial coding region of aminopeptidase protein generates protective immunity by inducing Th1 stimulatory response against experimental visceral Leishmaniasis, *International Journal for Parasitology Volume 42, Issue 5, 1 May 2012*.
8. Pramod Kumar Kushawaha, Reema Gupta, **Chandra Dev Pati Tripathi**, Prashant Khare, Anil Kumar Jaiswal, Shyam Sundar, Anuradha Dube. *Leishmania donovani* Triose Phosphate Isomerase: a potential vaccine target against Visceral Leishmaniasis, *Plos-one September 2012 / Volume 7 / Issue94 / e45766*.
9. Prashant Khare, Anil Kumar Jaiswal, **Chandra Dev Pati Tripathi**, Sumit Joshi, Shyam Sundar, Anuradha Dube. Efficacy of *Leishmania donovani* trypanothione reductase, identified as a potent Th1 stimulatory protein, for its immunogenicity and prophylactic potential against experimental visceral leishmaniasis, *Parasitology Research/December 2013/ DOI 10.1007/s00436-013-3716-5*.
10. Reema Gupta, Vikash Kumar, Pramod Kumar Kushawaha, **Chandra Dev Pati Tripathi**, Sumit Joshi, Amogh Anant Sahasrabuddhe, Kalyan Mitra, Shyam Sundar, Mohammad Imran Siddiqi, Anuradha Dube. Characterization of Glycolytic Enzymes - rAldolase and rEnolase of *Leishmania donovani*, Identified as Th1 Stimulatory Proteins, for Their Immunogenicity and Immunoprophylactic Efficacies against Experimental Visceral Leishmaniasis, *Plos-one January 2014/Volume 9 /Issue 1/e86073*.
11. Prashant Khare, Anil Kumar Jaiswal, **Chandra Dev Pati Tripathi**, Sumit Joshi, Shyam Sundar, Anuradha Dube. Immunoprotective responses of Th1 stimulatory protein- S-Adenosyl-L-Homocysteine Hydrolase against Experimental visceral Leishmaniasis, *Clin Exp Immunol. 2016 Feb 22. doi: 10.1111/cei.12780*.
12. Joshi S, Yadav NK, Rawat K, **Tripathi CD**, Jaiswal AK, Khare P, Tandon R, Baharia RK, Das S, Gupta R, Kushawaha PK, Sundar S, Sahasrabuddhe AA, Dube A. Comparative Analysis of Cellular Immune Responses in Treated *Leishmania* Patients and Hamsters against Recombinant Th1 Stimulatory Proteins of *Leishmania donovani*, *Front Microbiol. 2016 Mar 22; 7:312. doi: 10.3389/fmicb.2016.00312*.

ABSTRACTS PUBLISHED

1. **Chandra Dev Pati Tripathi**, Mastan Singh, Jyotsna Agarwal, Chandra Kanta. Spotted fever

rickettsiosis in North India in the “International Conference on Parasitology” OMICS International, USA at Double Tree by Hilton Philadelphia Airport Philadelphia, Pennsylvania, USA, August 24 – 26, 2015.

2. **Chandra Dev Pati Tripathi**, Pramod K. Kushawaha, Reema Gupta, Prashant Khare and Anuradha Dube. *Withania somnifera* chemotype NMITLI 101R augments the antileishmanial efficacy of Miltefosine, Paromomycin, and Amphotericin B in *Leishmania donovani* infected hamsters in 5th World Congress on Leishmaniasis – Worldleish 5 at Porto de Galinhas, PE, Brazil, 13th to May 17th, 2013.
3. **Chandra Dev Pati Tripathi**, Anil K. Jaiswal, Reema Gupta, Susheela Kushawaha, Shailija Misra-Bhattacharya and Anuradha Dube. Prophylactic efficacy of *Withania somnifera* chemotype 118R –against *Leishmania donovani* infection in golden hamster in 23rd National Congress on Parasitology at Chennai, [India], 18th-20th November, 2011.
4. **Chandra Dev Pati Tripathi**, Shailja Misra-Bhattacharya and Anuradha Dube. Chemotherapy adjunct efficacy of *Withania somnifera* chemotype 118R –against *Leishmania donovani* infection in golden hamster in 5th Annual Meeting of The Cytometry Society, India & 13th Indo-US Cytometry Workshop on Advanced Flow Cytometry Techniques at Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, Calcutta, [India], 12th to 17th October, 2012.
5. **Chandra Dev Pati Tripathi**, Prashant Khare, Pramod K. Kushawaha, Reema Gupta, Shailja Misra Bhattacharya, and Anuradha Dube. Immunoprophylactic efficacy of *Withania somnifera* chemotype- 101R against *Leishmania donovani* infection in golden hamster in 5th International symposium on ‘CTDDR-2013: Drug development for Orphan/Neglected diseases’ at Central Drug Research Institute, Lucknow, [India], 26th to 28th February, 2013.
6. Reema Gupta, Pramod K. Kushawaha, **Chandra Dev Pati Tripathi** and Anuradha Dube. Evaluation of recombinant *Leishmania donovani* Enolase as a suitable vaccine candidate against experimental Visceral leishmaniasis in SBC, at CIMAP, Lucknow, [India], 12th -15th November, 2011.
7. Reema Gupta, Pramod K Kushawaha, **Chandra Dev Pati Tripathi**, Shyam Sundar and Anuradha Dube. A novel recombinant *Leishmania donovani* p45-a partial coding region of methionine aminopeptidase generates protective immunity by inducing Th1 stimulatory response against experimental visceral Leishmaniasis in ICABS, at Kannur University, Kannur [India], 15th -17th March, 2012.
8. Prashant Khare, **Chandra Dev Pati Tripathi**, Anil Kumar Jaiswal, Sumit Joshi and Anuradha

Dube. Immunogenicity and Protective efficacy of Recombinant Adenosylhomocysteinase(ADHT) of *Leishmania donovani* in 5th International symposium on ‘‘CTDDR-2013: Drug development for Orphan/Neglected diseases’’ at Central Drug Research Institute, Lucknow, [India], 26th to 28th February, 2013.

9. Anuradha Dube, **Chandra Dev Pati Tripathi**, Sumit Joshi, Reema Gupta, Pramod K. Kushawaha, Anil K Jaiswal, Prashant Khare, Rati Tandon, Rajendra K Baharia, Sanchita Das and Shyam Sundar. Feasibility of Th1 stimulatory polyproteins identified through proteomics as potent vaccine candidates for the development of synthetic/DNA vaccine against visceral Leishmaniasis in 5th World Congress on Leishmaniasis – Worldleish 5 at Porto de Galinhas, PE, Brazil, 13th to May 17th, 2013.
10. Prashant Khare, **Chandra Dev Pati Tripathi**, Anil K Jaiswal, Sumit Joshi, and Anuradha Dube. Trypanothione reductase – a Th1 stimulatory protein is less immunogenic but provides better prophylactic efficacy against experimental visceral leishmaniasis in 5th World Congress on Leishmaniasis – Worldleish 5 at Porto de Galinhas, PE, Brazil, 13th to May 17th, 2013.
11. Anil K Jaiswal, Prashant Khare, Sanchita Das, Rajendra Baharia, **Chandra Dev Pati Tripathi**, Sumit Joshi, and Anuradha Dube. Cloning, Overexpression, Purification, and Immunogenicity of a novel putative chaperonin TCP 20 protein of *Leishmania donovani* amastigote in 5th World Congress on Leishmaniasis – Worldleish 5 at Porto de Galinhas, PE, Brazil, 13th to May 17th, 2013.

CONFERENCES/SYMPOSIA/WORKSHOPS ATTENDED

1. Participated in 23rd National Congress on Parasitology at Anna University, Chennai, [India], 18th-20th November, 2011.
2. Participated in 5th Annual Meeting of The Cytometry Society, India at Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, Calcutta, [India], 12th to 13th October, 2012.
3. Participated in 13th Indo-US Cytometry Workshop on Advanced Flow Cytometry Techniques at Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, Calcutta, [India], 14th to 17th October, 2012.
4. Participated in the academic & interaction sessions during the ‘‘5th Science Conclave / Inspire Internship Program’’ A Congregation of Nobel Laureates and Eminent Scientists at Indian Institute of Information Technology, Allahabad (IIIT-A), [India], 8th to 14th December, 2012.
5. Participated in the International symposium on Current Trends In Genetic & Genomic

Medicine at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, [India], 31st January 2013.

6. Participated in the National symposium on Update on Screening of Breast & Cervical Cancer at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, [India], 4th February 2013.
7. Participated in the 5th International Symposium on Drug Development for Orphan / Neglected Diseases “ CTDDR – 2013 ” at CSIR – Central Drug Research Institute (CDRI), Lucknow, [India], 26th – 28th February 2013.
8. Participated in the 5th World Congress on Leishmaniasis – Worldleish 5 at Porto de Galinhas, PE, Brazil, 13th to May 17th, 2013.
9. Participated in the 102nd Indian Science Congress (ISC-2014) at University of Jammu, Jammu, India, 3rd to February 7th, 2014.
10. Participated in the X Joint Annual Conference of ISMOCD & IAE on Reverse the Challenge: Vector Borne, Emerging Infectious and Non Communicable Diseases” at Goa Medical College and Hospital, Goa, 10th to 12th October, 2014.
11. Participated in the 27th Annual National Conference & International CME on “Innovations in Atherosclerosis & Cardiac Diseases” organized by Department of Pathology at King George’s Medical University, Lucknow, Uttar Pradesh, India, 25th to 27th November, 2014.
12. Participated in the Basic Life Support Workshop organized by Department of Anaesthesiology at King George’s Medical University, Lucknow, Uttar Pradesh, India.
13. Participated in the International Symposium on “Genetics & Genomics In Modern Clinical Medicine” organized by The Indo UK Genetic Education Forum, Wales Gene Park, Cardiff University, UK and King George’s Medical University, Lucknow, Uttar Pradesh at King George’s Medical University, Lucknow, Uttar Pradesh, India, 9th to 10th February, 2015.
14. Participated in the “Medical writing workshop” on April 1, 2015 organized by research cell at King George’s Medical University, Lucknow.
15. Participated in the “Research Showcase-2014-15” on 10th February, 2015 organized by research cell at King George’s Medical University, Lucknow.
16. Participated in the “Introductory Workshop on Evidence Based Medicine” organized by Research Cell, King George’s Medical University, Lucknow at King George’s Medical University, Lucknow, Uttar Pradesh, India, 20th to 21th June, 2015.
17. Participated in the “International Conference on Parasitology” OMICS International, USA at Double Tree by Hilton Philadelphia Airport Philadelphia, Pennsylvania, USA, August 24 –

26, 2015.

18. Participated in the “Inaugural CME in Electron Microscopy: Basics, Applications and Advances” organized by Department of Pathology, King George’s Medical University at King George’s Medical University, Lucknow, Uttar Pradesh, India, November 29, 2015.

TECHNIQUES KNOWN AND APPLIED

1. **Immunological:** Cytokine estimation, ELISA, IFA, Weil Felix Test, ELISPOT, lymphocyte transformation test (LTT), MTT assay for Cell proliferation, Nitric oxide Estimation, Flow cytometric analysis.
2. **Molecular Biology/Biochemical:** Isolation of parasite genomic DNA, plasmid isolation, Molecular cloning and expression, isolation of RNA, PCR, RT-PCR, colony hybridization, SDS-PAGE, western blotting, Two Dimensional (2D) gel electrophoresis, DNA fragmentation study, TUNNEL assay, AnnexinV-FITC, PI staining for apoptosis study.
3. **Cell Culture:** Human peripheral blood mononuclear cells, Isolation of peritoneal exudates cells of experimental animals, maintenance of cell lines: N2A, BV-2, THP-1, BHK, COS-7, RAW 264.7 and J774. Culture of *Leishmania* promastigote strains *in vitro*.
4. **Microbiological:** Isolation and culture of bacteria (*E. coli*-DH5 α strain), Fungi and different species of *Leishmania*. Staining/microscopic analysis of microbial specimens, Mutant isolation by replica plating.
5. **Instrumentations:** Flow cytometric analysis, florescent microscope, ELISA reader, High and low speed centrifuge, 2D gel electrophoresis, LP Biological system, Prep Cell-491.
6. **In vivo techniques:** *In vivo* maintenance of *Leishmania* strains in hamster model.
7. **Animal handling:** Hamster, Rabbit, Mice and Rat.
8. **Chromatographic techniques:** working experience of column, paper & thin layer chromatography as well as HPLC.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- ❖ Life member of Indian Science Congress (Membership No. L22647).

SEQUENCES SUBMITTED TO NCBI

1. Baharia, R.K., Tandon, R., Kushwaha, P., Gupta, R., Das, S., Jaiswal, A.K., **Tripathi, C.D.P.**,

and Dube, A. *Leishmania donovani* strain Dd8 hypothetical protein gene, partial cds. **Accn no. JF957190.**

2. Jaiswal, A.K., Kushawaha, P.K., Khare, P., Gupta, R., Tandon, R., Baharia, R., Das, S., Mishra, P., **Tripathi, C.D.P.** and Dube, A. *Leishmania donovani* strain 2001 heat shock protein-83 (HSP-83) gene, complete cds. **Accn no. HQ230577.**
3. Tandon, R., Baharia, R.K., Das, S., Misra, P., Jaiswal, A.K., **Tripathi, C.D.P.**, Sahasrabuddhe, A. and Dube, A. *Leishmania donovani* strain Dd8 histone H2A gene, complete cds. **Accn no. JF784009.**
4. Khare, P., Jaiswal, A.K., Das, S., Kushawaha, P.K. and **Tripathi, C.D.P.**, *Leishmania donovani* strain MHOM/IN-Dd8 trypanothione reductase-like (tpr) mRNA, complete sequence. **Accn no. JN007485.**
5. Gupta, R., Kushawaha, P.K., **Tripathi, C.D.P.**, Sundar, S. and Dube, A. *Leishmania donovani* strain Dd8 p45 gene, partial cds. **Accn no. EU723851.**

COMPUTER PROFICIENCY

- ❖ Well acquainted with Windows operating system and associated application software (MS-Office) pertaining to text, graphics and analytical processing. Experience in statistical analysis by Graph Pad Prism® and working knowledge of photo editing software- Adobe Photoshop.

PERSONAL PROFILE

Father's Name	Dr. R.D.Tripathi
Date of Birth and Place	05.07.1983/Basti(U.P.), India
Sex	Male
Nationality	Indian
Marital Status	Married
Languages Known	Hindi & English
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REFERENCES

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