# **CURRICULUM VITAE**

Name **Promod Mehta** Date of Birth Sept 4, 1959

Indian Nationality

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Cell #



# **Educational Qualifications**

Degree	Institution	Year		
Ph.D. (Microbiology)	Panjab University/ Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh, India	1988		
MSc (Hons.) Microbiology	Panjab University Chandigarh, India	1983		
BSc (Hons.) Microbiology	Panjab University Chandigarh, India	1981		
Previous Position	ons			
2009-present	Professor, Centre for Biotechnology, Maharshi Dayanand University, Rohtak, India Associate Professor (Microbiology) at Swami Shradhanand (SSN)			
2006-2009				

10 vious i ositions					
2009-present	Professor, Centre for Biotechnology, Maharshi Dayanand University, Rohtak, India				
2006-2009	Associate Professor (Microbiology) at Swami Shradhanand (SSN) College, University of Delhi, India				
1998- 2005	Reader (Microbiology) at Swami Shradhanand (SSN) College, University of Delhi, India.				
May-Nov 2006	Visiting Assistant Professor at Dept. of Veterinary and Biomedical Sciences (VBS), University of Nebraska-Lincoln, (UNL) Lincoln, NE, USA				
July -Dec 2005	Visiting Assistant Professor at VBS, UNL, Lincoln, NE, USA				
May -Nov 2003	Visiting Assistant Professor at VBS, UNL, Lincoln, NE, USA				
1999-01	Postdoctoral Research Associate at VBS, UNL, Lincoln, NE				
1999-02	Senior Lecturer (Microbiology) at SSN College, University of Delhi, India.				
	Postdoctoral Fellow at Dept. of Internal Medicine, University of South				
	Alabama, Mobile, AL, USA from May - July, 1997.				
1994-96	Postdoctoral Fellow at Centers for Disease Control and Prevention (CDC), Atlanta, GA, USA from March 1994- March 1996.				
1989-94	Lecturer (Microbiology) at SSN College, University of Delhi, India and				

Postdoctoral Fellow Dept. of Medicine UCSD Medical Center, San Diego, CA, USA from April - Oct, 1993.

### **Honors / Awards**

1981 Received BSc degree in Microbiology with Honors from Panjab University, Chandigarh, India.

1983 Received MSc degree in Microbiology with Honors from Panjab

University, Chandigarh, India.

1983-88 Received Junior / Senior Reseach Fellowship from Indian Council of

Medical Research (ICMR), New Delhi, India to do Ph.D. at PGIMER,

Chandigarh.

# **Membership of Academic Societies:**

- 1.Permanent member of Association of Microbiologists of India (AMI).
- 2.Permanent life-member of Indian Immunology Society (IIS)

#### Refresher / Advanced Courses Studied

- 1. Biotechnology Refresher Course attended at JNU, New Delhi from April-May, 1999.
- 2.Life Sciences Refresher Course attended at JNU, New Delhi from Dec. 2003 Jan 2004.
- 3. Bioinformatics Course trained by Mascon Global Co, New Delhi in Dec 2004

## **Extramural funding**

Number of research projects being handled at present:

- i) DBT Project "Targeting Mycobacterium marinum mel2 locus with drug like compounds: its implications for in in vitro host cell interaction" (2012-15) (PI) (42.15 lakhs)
- ii) UGC sponsored Major Project (PI) 'Detection of immunodominant antigens and antibodies in biological samples of pulmonary and extra pulmonary tuberculosis patients by PCR amplified immunoassay' (2011-14) (PI) (9.52 lakhs)
- DST sponsored Project (PI) "Detection Of Potential Mycobacterium Tuberculosis Antigens In Extrapulmonary Tuberculosis Patients By Immuno-PCR" (2013-16) (22.56 lakhs)

## **Research Publications**

- 1. D.V Vadehra, R. Hashia, **P.K Mehta,** NK Chandan, and JK Gupta. 1984. An inhibitory substance in beet juice fermentation. International Sugar Journal 86:2003-206
- 2. **P.K.Mehta** and G.K.Khuller. 1987. Immune responses to sulpholipids of *Mycobacterium tuberculosis*. Indian Journal of Medical Research 86:558-563
- 3. **P.K.Mehta** and G.K.Khuller. 1988. Protective immunity to experimental tuberculosis by mannophosphoinositides of mycobacteria. Medical Microbiology and Immunology 177: 265-285
- 4. **P.K.Mehta** and G.K.Khuller, 1988. Serodiagnostic potentialities of ELISA using mannophosphoinositides of *M. tuberculosis*. Medical Microbiology and Immunology 177: 285-292
- 5. **P.K.Mehta** and G.K.Khuller, 1988. Suppression of macromolecular biosynthesis in *M. tuberculosis* by antimannophosphoinositides. FEMS Microbiology Letters 51:61-66

- 6. **P.K.Mehta** and G.K.Khuller, 1989. Activation of mouse peritoneal macrophages by mannophospoinositides of mycobacteria. Medical Microbiology and Immunology 178:21-28
- 7. **P.K. Mehta** and G.K.Khuller. 1989. Comparative evaluation of diagnostic significance of circulating immune complexes and circulating antibodies to mannophosphoinositides in pulmonary tuberculosis by ELISA. Medical Microbiology and Immunology 178:229-233
- 8. **P.K.Mehta** and G.K.Khuller, 1990. Immunogenicity of mannophosphoinositides of mycobacteria: Effect of cord factor (trehalose-6, 6' dimycolate). Folia Microbiologica 35:570-577
- 9. **P.K.Mehta,** GH King, E.White, JJ Murtagh, Jr and FD Quinn. 1996. Comparison of in vitro models for the study of *M. tuberculosis* invasion and intracellular replication. Infection and Immunity 64:2673-2679 (Citation Index more than 110)
- 10. E. Miltner, K. Darooghesh, **P.K. Mehta**, S.L. Cirillo, J.D. Cirillo., and L.E. Bermudez. 2005. Identification of *M. avium* genes that affect invasion of the intestinal epithelium. Infection and Immunity. 73: 4214-4221
- 11 **P.K. Mehta,** A. Pandey, S. Subbian, S.H. El-Etr, S.L. Cirillo, M. Samrakandi and J.D. Cirillo. 2006. Identification of *M. marinum* macrophage infection mutants. Microbial Pathogenesis 40: 139-151
- 12 **P.K. Mehta,** R Karls, E.White, E Ades. and FD Quinn. 2006. Entry and intracellular replication of *M. tuberculosis* in cultured human microvascular endothelial cells. Microbial Pathogenesis 41: 119-124.
- 13. S. Subbian, **P.K. Mehta**, S.L. Cirillo, and J.D. Cirillo. 2007. *Mycobacterium marinum mel2* locus displays similarity to bacterial bioluminescence systems and plays a role in defense against reactive oxygen and nitrogen species. BMC Microbiology 2007 Jan 19; 7:4
- 14. S.Subbian, **P.K. Mehta,** S.L. Cirillo, and J.D. Cirillo. 2007. A *Mycobacterium marinum mel2* mutant is defective for growth in macrophages producing reactive oxygen and nitrogen species. Infection and Immunity 75: 127-134.
- 15. **P.K. Mehta**, M. Kalra, G.K. Khuller, D. Behera and Indu Verma 2012. Development of ultra-sensitive polymerase chain reaction-amplified Immunoassay based on mycobacterial RD antigens, its implications in the serodiagnosis of tuberculosis. Diagnostic Microbiology and Infectious Disease 72: 166-174.
- 16. A. Raj, N. Singh and **P.K. Mehta**. 2012. **Gene Xpert** MTB/RIF Assay: A new hope for extrapulmonary tuberculosis', IOSR Journal of Pharmacy 2:83-86.
- 17 **P.K. Mehta**, A. Raj, N. Singh and G.K. Khuller. 2012 Diagnosis of extrapulmonary tuberculosis by PCR. 2012. FEMS Immunology and Medical Microbiology 66:20-36.
- 18. **P.K. Mehta**, A. Raj, N. Singh and G.K. Khuller. 2014 Detection of microbial antigens by Immuno-PCR (PCR Amplified Immunoassay. J Med . Microbiol .. 63:627-641.
- 19. **P.K. Mehta**, Renu Dharra, Zoozeal Thakur, G.K. Khuller and UD Gupta. 2014. An update on experimental tuberculosis in animal models with emphasis on latency. J. Med. Microbiol. (communicated).

# **Lectures delivered at National meetings**

- 1. Delivered a lecture "Role of mel2 locus on mycobacterial pathogenesis" at 3<sup>d</sup> Winter Symposium-Molecular Medicine at Translational Crossroads, PGIMS, University of Health Science, Rohtak. On Dec 15, 2009.
- 2. Delivered a lecture "ELISA and Immuno-PCR assay for the diagnosis of pulmonary tuberculosis patients" National seminar on Biotechnology and Health: prospects and perspectives in 21<sup>st</sup> Century (sponsored by ICMR) organized by Dept of life Sciences,

- Institute of Allied Sciences and Computer applications, ITM Universe, Gwalior on 19<sup>th</sup>-20<sup>th</sup> March, 2010.
- 3.Organizing Secretary, National Conference on Medical Biotechnology-Vision 2020 held at CBT, MDU, Rohtak on 16-18<sup>th</sup>April, 2010. Spoke introductory speech as well as delivered deliberations and actively participated in several activities.
- 4. Delivered a lecture "Diagnosis of Tuberculosis by molecular methods" Colloquium on Microbial Technology organized by CBT, MDU and Microbiology Dept, MDU, Rohtak on 7<sup>th</sup> Aug 2010.
- 5. Delivered an online lecture "Detection of Mycobacterium tuberculosis protein antigens by Immuno-PCR for an early diagnosis of tuberculosis" organized by Target Meeting(TM)"s 2<sup>nd</sup> World Clinical Diagnostics Online Conference, TX, USA.

# National/International Conferences / Symposia attended and Abstracts published :

- 1. **Mehta P.K.,** and Khuller, G.K. (1992) Induction of resisance to tuberculosis in mice with mannophosphoinositides of mycobacteria. 'World Congress on tuberculosis'. Bethesda, Maryland.
- 2. **Mehta, P.K.,** King C.H., Birkness, K.Murtagh, J.J. Jr., and Quinn, F.D. (1995). Comparing in vitro models to study *M. tuberculosis* virulence. J.Cell. Biochem. supplement 19B 24th Annual Keystone symposia held at Tammeron, Colorado.
- 3. **Mehta, P.K.,** King, G.H., Birkness, K, Murtagh, J.J.Jr., and Quinn, F.D (1995) In vitro models to study virulence of *M. tuberculosis* 95th American Society for Microbiology (ASM) General meeting, Washington, D.C.
- 4. **Mehta, P.K.,** King, C.H, Birkness, K., Murtagh, J.J. Jr and Quinn, F.D (1995). Comparing in vitro models to study invasion and intracellular replication of *M. tuberculosis*. 18th IUTALD-ER (International Union against tuberculosis and lung diseases-Eastern Region) Conference, Dhaka, Bangladesh.(oral presentation).
- 5 **Mehta, P.K.,** King, C.H, Adesh, E, Murtagh, J.J. and Quinn F.D. (1998). Invasion and intracellular replication of *M. tuberculosis* in a human lung microvascular endothelial cell line. 10th International Congress on Immunology, New Delhi (India)
- 6. **Mehta, P.K.,** Cirillo, S.L., Samrakandi, M, El Etr, S, and Cirllo, J.D. (2002). Use of transposon mutagenesis to identify novel *M. marinum* entry loci. "International Symposium on Current Developments in Drug Discovery for Tuberculosis". Astra Zeneca Research Foundation, India.
- 7. **Mehta, P.K.,** Sahar El Etr, Samrakandi, M, and Cirillo, J.D. (2002). Efficient mutagenesis of *M. marinum* and its use to identify putative virulent loci. 4th World Congress on TB, Washington, D.C.
- 8. Attended and participated in "International Symposium on Recent Trends in Tuberculosis Research" (2004) at ICGEB, New Delhi
- 9. S.L. Cirillo, **P.K. Mehta**, A. Pandey, S. Subbian, B. Park, S.H. El-Etr, M. Samrakandi and J.D. Cirillo (2005) Identification of mycobacterial genes .that affects interactions with macrophages. US-Japan Cooperative Medical science program. 40<sup>th</sup> Tuberculosis and Leprosy and Research Conference. pp77-81.
- 10. S. Subbian, **P.K. Mehta**, S.L. Cirillo, and J.D. Cirillo.(2006). The mycobacterial *mel2* locus displays similarity to bioluminescence system s and affects survival in macrophages. American Society for Microbiology (ASM) 106<sup>th</sup> General meeting held at Orlando, FL, USA
- 11. **P.K. Mehta,** S. Subbian, S.L. Cirillo and J.D. Cirillo (2006) Association of mycobacterial *mel2* locus with enhanced TNF-alpha production and increased intracellular survival in murine macrophages. International Symposium on Frontiers in

- Tuberculosis Research held at International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi, India (oral presentation)
- 12. **P. Mehta,** S.Pacheco, M. Konkel and G.E. Duhamel (2008). The cytolethal distending toxin of macaque *Campylobacter jejuni* is required for proinflammatory CXCL8 chemokine response of human intestinal epithelial cells in vitro. Keystone Symposia on "Pathogenesis and Control of Infectious Diseases and Drug Resistant Organisms" at Bangkok, Thailand.
- 13. **P. Mehta**, M. Kalra, D.,Behra, G.K. Khuller and I. Verma (2009) Ultra sensitive development of Immuno-PCR for the detection of RD antigens and antibodies to these antigens in biological samples of TB patients. Keystone Symposia Overcoming the crisis of TB and AIDS, Arusha, Tanzania, Africa
- 14. **P Mehta** and GE Duhamel Attachment of pathogenic *Brachyspira pilosicoli* intestinal spirochete but not *Brachyspira aalborgi* correlates with human intestinal epithelial INT 407 cells CXCL8 chemokine response in vitro at American Society for Microbiology (ASM) 110 General Body meeting at San Diego, CA, USA in May, 2010
- 15. **P. Mehta**, M. Kalra, D.,Behra, G.K. Khuller and I. Verma (2010) Detection of RD antigens and antibodies in active pulmonary and extra pulmonary TB by Immuno-PCR. International Symposium on TB diagnostics: innovative to make an impact. held at ICGEB, New Delhi in Dec, 2010
- 16. **P Mehta** (2011) Attended and participated TB research meeting at St. John's Research Institute, Bangalore August 24-26<sup>th</sup> 2011.
- 17. **P Mehta** (2011). Attended and participated in International Conference on Microbial Biotechnology for sustainable development. 52<sup>nd</sup> Annual conference of Association of Microbiologists of India (AMI) held at Panjab University Chandigarh on 3<sup>rd</sup>-6<sup>th</sup> Nov, 2011.
- 18. NP Singh, A Raj and **PK Mehta** (2013). Detection of *Mycobacterium tuberculosis* protein and glycolipid antigens by Immuno-PCR (PCR amplified immunoassay) for an early diagnosis of tuberculosis. National Symposium on Biotechnology: Present Status and Future Prospectus, 15<sup>th</sup>-16<sup>th</sup> March 2013, held at Department of Biotechnology, DCRUST, Murthal (Haryana), India.
- 19. Renu Dharra, Mahesh Kulharia, Sakshi Talwar, Amit Kumar Pandey and **Promod Mehta** (2013). Virtual screening as a tool to identify antagonists for *Mycobacterium marinum* MelF protein. 54th Annual Conference of Association of Microbiologists of India (AMI-2013) and International Symposium on "Frontier Discoveries and innovations in Microbiology and its Interdisciplinary relevance" (FDMIR-2013 at MDU, Rohtak on 17<sup>th</sup>-20<sup>th</sup> November, 2013
- 20. Netra Pal Singh, Ankush Raj and **Promod Mehta** (2013). Detection of *Mycobacterium tuberculosis* 30KDa and ESAT-6 protein antigens by Immuno-PCR (PCR amplified immunoassay) for an early diagnosis of tuberculosis. 54th Annual Conference of AMI-2013 and International Symposium on "Frontier Discoveries and innovations in Microbiology and its Interdisciplinary relevance" (FDMIR-2013) at MDU, Rohtak on 17<sup>th</sup>-20<sup>th</sup> November, 2013.
- 21.Delivered a lecture Diagnosis of tuberculosis by multiplex PCR and Immuno-PCR (PCR amplified immunoassay) at an International conference "Genomics and Proteomics Research" at Radisson Blue, New Delhi, India organized by Select Biotech on 12-13<sup>th</sup> June, 2014 (invited Speaker).