

CURRICULUM VITAE

*Of*

**Dr Rajpal S Kashyap**

**(M.Sc, Ph.D)**

Sr. Research Scientist

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## CURRICULUM-VITAE

1. **Name** : Dr. Rajpal Singh Kashyap
2. **Date of Birth**: 26.05.1972
3. **Present position /designation**: Senior Research Consultant
4. **Address with Tele/Fax/E-mail**

**Department** : Biochemistry Research Laboratory  
**Institute/University** : Central India Institute of Medical Sciences  
**Address** : 88/2, Bajaj Nagar, Nagpur, Maharashtra.  
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### 5. **Academic qualifications**

<b>Degree (B.Sc. or equivalent onwards)</b>	<b>University</b>	<b>Subject(s)</b>	<b>Year of passing</b>
Bachelor in Science	Nagpur University	Biochemistry, Microbiology, Chemistry	1995
Master in Science	Nagpur University	Biochemistry	1998
Ph D	Nagpur University	Biochemistry	2004
BA (Addl.)	Nagpur University	History	1996

### **Ph.D title**

Development of a diagnostic marker for tuberculous meningitis (TBM)

## **6. Positions held (In chronological order)**

<b>Year</b>	<b>Appointment/Position</b>	<b>Institution</b>
2007-present	Sr. Research Consultant	Central India Institute of Medical Sciences, Nagpur
2004-2006	Research Consultant	Central India Institute of Medical Sciences, Nagpur
1998-2002	Research assistant	Central India Institute of Medical Sciences, Nagpur
1998-2002	Research fellow	Central India Institute of Medical Sciences, Nagpur
2000-2002	Visiting lecturer	Sindhu Mahavidyalaya, Nagpur University
1998-1999	Research fellow	UNICEF project

## **Presently, supervising a team of following research staff at the Institute**

<b>Sr. No</b>	<b>Name</b>	<b>Designation</b>
1	Mr. Prashant Deoras	Statistician
2	Dr. Amit Nayak	Research consultant
3	Ms. Shraddha Bhullar	Senior research fellow
4	Mr. Ali Abbas Husain	Senior research fellow
5	Ms. Seema Shekhawat	Senior research fellow
6	Ms. Neha Lande	Junior research fellow
7	Ms. Prutha Aloni	Technical Assistant
8	Ms. Sonali Manke	Technical Assistant
9	Ms. Anuja Kawle	Project co-ordinator
10	Mr. Sushant Kubade	Project fellow
11	Ms. Ragini Tiwari	Project fellow
12	Mr. Sumit Pantawane	Project fellow
13	Ms. Monika Shukla	Project fellow
14	Ms. Arti Mishra	Project fellow
15	Ms. Vinita Hutke	Project fellow
16	Ms. Prachi Bapat	Project fellow
17	Ms. Priyanka Nikhare	Project fellow
18	Mr. Milind Panchbhai	Research fellow
19	Ms. Sharda Bhagchandani	Research fellow

## **7. Ph.D Supervisor**

- Nagpur University, Faculty of Science, Biochemistry and Microbiology
- Datta Meghe Institute of Medical Sciences University, Clinical Biochemistry, Clinical Microbiology and Medical Biotechnology

## **8. Experience of Directing Research Work for M.Sc Dissertation**

Total number of students guided= 63 (List enclosed)

## 9. Experience of Directing Research Work for Ph.D degree

### Awarded

Year	Title	Name of the student
2014	Screening and characterization of selected herbal preparation for blood clot lysis	Mrs. Sweta Chourasia
2012	Identification of Biomarkers and Therapeutic Agents for Acute Ischemic Stroke	Mr. Amit Nayak

### Submitted

Sr.No	Title	Name of the student
1	Development of immunological test for early diagnosis of Chikungunya (CHIKV) viral infection	Ms. Shweta Morey

### In-process

Year	Title	Name of the student
1	Proteomic approach for differential diagnosis of latent from active tuberculosis	Mr. Milind Panchbhai
2	Antigen specific antibody production in goat peripheral blood mononuclear cells by in-vitro immunization	Mr. Hari Gaherwar
3	Development of immunological and molecular methods for the diagnosis of herpes simplex virus CNS infections	Ms. Shraddha Bhullar
4	Heterologous prime boost immunization using experimental animal (mice) to improve efficacy of vaccine against TB	Mr. Ali Abbas Husain
5	Study of Heat Shock Proteins and Cytokines in Diagnosis and Pathogenesis of Pulmonary and Extra Pulmonary Tuberculosis	Ms. Seema Shekhawat
6	Studies on molecular diagnosis of bacterial infections of central nervous system	Ms.Sharda Bhagchandani

## 10. Major R&D projects / programmes implemented

### (a) Completed projects:

S. No	Funding Source	Project title	Total funding	Duration
1	Department of Science and Technology, India	Diagnostic value of 30 KD protein comprising of Ag 85 complex in extra CNS tuberculosis	14.00 Lakhs	2006-2009
2	Indian Council of Medical Research, New Delhi, India	Study of heat shock proteins and cytokines in diagnosis and pathogenesis of Tuberculous meningitis	18.64 Lakhs	2009-2012
3	Department of Biotechnology, India	Proteomic approach for differential diagnosis of latent from active tuberculosis	19.86 Lakhs	2008-2011
4	Department of Biotechnology, India	Development of immunological test for early diagnosis of Chikungunya (CHIKV) viral infection	24.06 Lakhs	2008-2011

**(b) Ongoing projects:**

<b>S. No</b>	<b>Funding Source</b>	<b>Project title</b>	<b>Total funding</b>	<b>Duration</b>
1	Department of Biotechnology, India	Development of low cost prognostic kit(s) for brain stroke patients	18.53 Lakhs	2011-2014
2	Council of Scientific and Industrial Research	Novel method of in-vitro production of polyclonal antibodies: An alternative to animal experiments	13.50 Lakhs	2013-2016

**11. List of national and international publications in peer reviewed journals**

Total number of publications= 66 (List enclosed)

**12. List of Patents taken/applied**

1. Patent number: 91/MUM/2004 for “A method for isolation of 30 kD protein antigen in tuberculous meningitis cerebrospinal fluid”.
2. Patent number: 522/MUM/2005 for “Development of diagnostic kit for pulmonary and other extra central nervous system tuberculosis using 30kD antigen comprising of Ag85 complex”.
3. Patent number: 1306/MUM/2006 for “A thrombolytic composition”.

**13. Awards won**

1. Travel award from Department of Biotechnology to attend international conference on tuberculosis in Gambia, West Africa. (2006)
2. Japan Neuroscience Travel Award to attend The 30th Annual Meeting of Japan Neuroscience Society (JNS) in Japan (September 2007)
3. Global Health Award ( Bill and Melinda Gates foundation) to attend Challenges of Global Vaccine Development (T1) October 8 - 13, 2007, Cape Town, South Africa.
4. Japan Neuroscience Travel Award to attend The 31 th Annual Meeting of Japan Neuroscience Society (JNS) in Tokyo, Japan (July 2008)
5. Welcome trust travel award to attend tuberculosis conference (Keystone Symposium) Thailand, Bangkok, 2009
6. Keystone Symposia award to attend the meeting on “The Innate Immune Response in the Pathogenesis of Infectious Disease (E1)” from May 10-15, 2013 at A Universidade Federal de Ouro Preto (UFOP), Ouro Preto, MG, Brazil

7. Best paper award for Diagnostic value of 30 kD protein in tuberculosis. National Symposium on recent advances in science: A prospective (2005) Dehradun, India
8. Moulana Mohammed Ali Zohar Memorial Award (2006) in the field of Medical Sciences
9. Sikh Education Society Appreciation award for excellence in Medical Sciences
10. Vidarbha Association of Medical Microbiologists, Appreciation Award (2009), Nagpur
11. Global Health Travel Awards Supported by the Bill & Melinda Gates Foundation to attend meeting to attend the Keystone Symposium to be held at the Keystone Resort, Keystone, Colorado, USA on Mar 30 - Apr 4, 2014.

**14. Editorial Board Member and Reviewer of the following journal**

1. Asian Journal of Biochemistry
2. Current Research in Tuberculosis
3. Journal of Biological Sciences
4. Journal of Medical Sciences
5. Research Journal of Microbiology
6. Trends in Medical Research

**15. Particulars of memberships of academies/scientific societies/professional bodies**

***Member of the following learned societies:***

1. Japan Neuroscience Society
2. International Brain Research Organization
3. Society of Biological Chemist (India)
4. Indian Academy of Neurosciences (India)
5. Association of Clinical Biochemistry of India (India)
6. Society of Neurochemistry (India)

***Member of following organizations:***

1. MAHAN Trust, Dharni, Melghat
2. Member of Steering Committee, CIIMS, Nagpur
3. Member, Research Committee, CIIMS, Nagpur

## **16. Invited lectures in institutes/workshops/seminar/conferences**

1. First International Conference on Global Sustainable Biotech Congress, 27 November -1 December 2000, Nagpur, India.
2. Association of Clinical Biochemist of India 2001, Nagpur, India.
3. 22<sup>nd</sup> IAPM Maharashtra Chapter Conference MAPCON 2001, Nagpur, India.
4. 9<sup>th</sup> APCCB and 28<sup>th</sup> Annual Conference of ACBI, 9-4 March 2002.
5. International CME on laboratory techniques and their utility in the diagnosis of tuberculosis (2004), Sewagram, India.
6. National Symposium on recent advances in science: A prospective (2005), Dehradun, India.
7. Annals Academy of Neurosciences conference (2005), Gwalior, India.
8. International symposium on New frontiers in tuberculosis research, Dec 4<sup>th</sup> -6<sup>th</sup>, Delhi, India.
9. 2<sup>nd</sup> Bio-tech congress 2006 AD, Nagpur, India.
10. ‘New Frontiers in Drug Discovery’, 18-30 June, 2007, Smt. Kishoritai Bhoyar College of Pharmacy, Nagpur.
11. Symposium on “CNS Infections”. Central India Institute of medical Sciences. Nagpur 07<sup>th</sup>-08<sup>th</sup> Feb 2009.
12. National Conference on CME in Immunology, 27-28 November 2009, Department of Biochemistry, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara.
13. 25<sup>th</sup> Annual Meeting of Society for Neurochemistry, India, International symposium and silver jubilee celebrations, 7-9 January 2011, School of Life Sciences, University of Hyderabad, Hyderabad.
14. 17<sup>th</sup> Training Course on “Immunodiagnosics for Infectious Diseases”, 31 January-5 February 2011, J.B. Tropical Disease and Research Centre, Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha.
15. International conference on “Biotechnology for Better Tomorrow”, 6-9 February 2011, Department of Microbiology, Dr. Babasaheb Ambedkar, Marathwada University Subcampus, Osmanabad, M.S.
16. “Biotalk: Symposium on Anti Immunology”, 10-11 October 2011, Hislop School of Biotechnology, Nagpur.

17. UGC sponsored National Conference on “Advances in Life Sciences for Sustainable Rural Development (AISSRD-2011), 11-12 October 2011, Department of Microbiology and Zoology, Shankarlal Khandelwal Arts, Science and Commerce College, Akola.
18. UGC Sponsored National Level Seminar on Recent Advances in Medical Microbiology And Immunology, 18 October 2011, Shri Sachhidanand Shikshan Sanstha’s arts, commerce and science college, Koradi, Nagpur.
19. International Conference on Technological Challenges in Developing Affordable in vitro Molecular Diagnostics, 11-14 March 2012, Navi Mumbai, India.
20. National Conference on Developmental Exploitation of Microbial Systems for Mankind, 27-28 April 2012, Department of Microbiology, Mata Gujri Mahila Mahavidyalaya, Jabalpur.
21. UGC Sponsored National Conference on Basic Research Vs Applied Research in Life Sciences, 5-6 October 2012, S.B.E.S College of Science, Aurangabad.
22. 67<sup>th</sup> National Conference on Tuberculosis and Chest Disease, NATCON-2013, 8-10 February 2013, Bihar Tuberculosis Association and The Tuberculosis Association of India, Patna.
23. National Conference on “Biomarkers in Health and Diseases”, 21-22 February 2013, National Institute of Miner’s Health, Nagpur.
24. 27<sup>th</sup> Annual meeting of SNCI and International Conference on “Recent Advances in Molecular Mechanisms of Neurological Disorders”, 21-23 February 2013, AIIMS, New Delhi.
25. Invited talk at Shri Sadashivrao Patil Shikshan Sanstha’s, Department of Pharmacy, Nagpur.
26. Invited talk at Dolphin Institute of Biomedical Sciences, Manduwala, Dehradun.
27. UGC sponsored National Conference on Pharmacogenomics: Revolutinizing Personalized Medicine, Department of Biotechnology and Microbiology, Nabira Mahavidyalaya, Katol.
28. Visiting lecturer at Sindhu Mahavidyalaya, Nagpur University for the session 2000-2002.
29. Visiting lecturer at Department of Molecular Biology and Genetic Engineering, RTM, Nagpur University for the seesion 2012-2013.

## **17. List of International Conference presentations**

1. **Kashyap RS et al (2006).** Tuberculosis 2006 International Conference and Workshop, April 21<sup>st</sup> -May 1<sup>st</sup>, Kololi, Gambia, **West Africa.**
2. **Kashyap RS et al (2006).** The 29<sup>th</sup> Annual Meeting of the Japan Neuroscience Society, July 19-21, Japan Neuroscience Society, Kyoto, **Japan.**
3. **Kashyap RS et al (2007).** Identification & characterization of protein marker (s) for diagnosis and prognosis of acute ischemic stroke patients. *The 30<sup>th</sup> Annual Meeting of the Japan Neuroscience Society, September 10-12, Japan Neuroscience Society, Pacifico Yokohama, Tokyo, Japan.*
4. **Kashyap RS et al (2007).** Heterologous prime-boost immunization approach using a Ag 85 complex and BCG in PBMC model to improve the efficacy of vaccine in TB. “*Challenges of Global Vaccine Development*”, October 8 – 13, *Keystone symposia, Cape Town Conference Centre, Cape Town, South Africa.*
5. **Kashyap RS et al (2008).** Evaluation of inflammatory response in the serum sample of acute ischemic stroke patients.. *The 31st Annual Meeting of the Japan Neuroscience Society, July 10-12, Japan Neuroscience Society, Tokyo International Forum, Tokyo, Japan.*
6. **Kashyap RS (2009).** CIIMS approaches for TBM diagnosis. (Keystone Symposium) Bangkok, **Thailand.**
7. **Kashyap R S ( 2014).** **Expression of IL-10 in CSF of Tuberculous Meningitis Patients with Anti-Tb Treatment: Hope for a better tomorrow** , Keystone Symposium ,Keystone Resort, Keystone, Colorado, USA on Mar 30 - Apr 4, 2014.

## **18. Workshops/Conferences/Seminars Organized**

1. The annual workshops on Immunological, Molecular and Animal cell Culture Techniques at Central India Institute of Medical Sciences, Nagpur since last 10 years.
2. National seminar on “CNS infections” by CME in Immunology on 7<sup>th</sup> – 8<sup>th</sup> February 2009 at Nagpur.
3. Workshop on “Advanced Research Techniques in Neurological Disorders” during 26<sup>th</sup> Annual Meeting of Society of Neurochemistry (India) on 9<sup>th</sup> – 11<sup>th</sup> January 2012 at Nagpur.
4. International conference on “Rejuvenation Neurochemistry: Bedside to Bench and Back to Bedside”, 26<sup>th</sup> Annual Meeting of Society of Neurochemistry (India) on 9<sup>th</sup> – 11<sup>th</sup> January

2012 at Nagpur.

**19. Training Courses Attended:**

1. Course on Immunodiagnosics for Infectious diseases, MGIMS< Sewagram, Wardha, India. Feb 25 to Mar 2, 2001.
2. Training on Animal Cell Tissue Culture, National Institute of Virology, Pune, India. Dec 10-24, 2002.
3. Summer course on Electrophoresis Techniques, Electrophoresis Institute, Yercaud, Salem, India. May 4-14, 2004.

**20. Conference papers presented in National conferences**

National: 80 (Up till 2010) (List enclosed)

**21. Collaboration with Companies/Industries**

1. Bhat Bio-tech India Private Limited, Bangalore
2. Span Diagnostics Ltd., Surat
3. Global Bio Sciences, Chhattisgarh

**22. Biotech Product & Process Developed during the past five years in the areas of biosciences/ biotechnology**

**A) TB antigen ELISA kit** (The developed assay is one of the important and early diagnostic indicator for TB). This ELISA based antigen detection test, not only detects almost every active TB patient (95% cases), but also can detect cases who have high exposure to TB patients or TB in the latent form. This test is developed from partial funding of Department of Biotechnology, Ministry of Science and Technology, Government of India and in-house funding of CIIMS.

**B) ADA Kit** [Adenosine deaminase (ADA) is a marker of T cell activation in all infectious and non-infectious diseases]

**C) TB PCR** (The test is developed using *IS6110* region of *M. tuberculosis* for the diagnosis of all types of TB)

**D) TB Multiplex ELISA** [This kit is designed so as to detect antibodies against six different *M tuberculosis* antigens (Ag 85b, 45 kDa, GroEs, Hsp 16, CFP-10 and ESAT-6)

**E) Chikungunya diagnostic kit** is under development.

All the above tests are handed over to CIIMS, Pathology Laboratory and regularly used for the diagnosis of all types of TB. The developed tests are not only used by local population of Nagpur, but majority of patients from Vidarbha region of Maharashtra and from other near states also use these tests.

#### **List of National Conference presentations**

1. **Kashyap RS et al (1999)**. Identification marker protein in CSF of TBM patients, *68<sup>th</sup> Society of Biological Chemists, Symposium on Current Trends in Biology*. Bangalore, India.
2. **Kashyap RS et al (2000)**. TBM diagnosis by SRID and Dot Elisa method, *49th Annual Meeting of Society of Biological Chemists*, Hyderabad, India.
3. **Kashyap RS et al (2002)**. Early diagnosis of tuberculous meningitis by Dot ELISA. *71<sup>st</sup> Annual meeting of SBC Nov 14<sup>th</sup> -16<sup>th</sup>*, Ludhiana, India
4. **Kashyap RS et al (2002)**. Application of Mancini technique as diagnostic test in CSF of Tuberculous meningitis patients. *70<sup>th</sup> Annual Meeting of Society of Biological Chemist, Hyderabad, India*
5. **Ray Parthasarathi, Kashyap RS et al (2003)**. Immunomodulatory effect of herbal drug *Tinospora Cordifolia* on the activities of cultured human lymphocytes. *Symposium on Stem Cell Technology, Hislop School of Technology and Biotech Society*. Nagpur, India
6. **Kusumbe AP, Kashyap RS et al (2003)**. Identification of marker protein(s) and a prospective study to evaluate reported markers NSE, VEGF and S-100bb in the serum of the patients with ischemic stroke and traumatic brain injury. *Symposium on Stem Cell Technology, Hislop School of Technology and Biotech Society*. Nagpur, India
7. **Meenal Agarwal, Kashyap RS et al (2003)**. Demonstration of components of antigen 85 complex in the cerebrospinal fluid of tuberculous meningitis. *Symposium on Stem Cell Technology, Hislop School of Technology and Biotech Society*. Nagpur, India
8. **Moumita Goswami, Kashyap RS et al (2003)**. Response to B Cells derived from CSF of TBM patients towards immobilized CPF antigen by IgG capturing ELISA. *Symposium on Stem Cell technology, Hislop School of Biotechnology and Biotech Society*. Nagpur, India

9. **Mudliar AV, Kashyap RS et al (2003)** Identification of protein marker(s) diagnosis of tuberculous meningitis. *Symposium on Stem Cell Technology, Hislop School of Biotechnology and Biotech Society*. Nagpur, India
10. **Kashyap RS et al (2003)**. Identification of components of Ag 85 complex by LC-MS/MS analysis in CSF of TBM. *FAOBMB Congress and Society of Biological Chemists meeting, Dec 7<sup>th</sup> – 11<sup>th</sup>*. Bangalore, India.
11. **Anju Mudaliar, Kashyap RS et al (2004)**. Cellular immune response in tuberculous meningitis: Expression of 65kd antigen in cells isolated from CSF. *Symposium on Stem Cell Technology, Hislop School of Biotechnology and Biotech Society*. Nagpur, India
12. **Behere MM, Kashyap RS et al (2004)**. Detection of culture filtrate protein of H37 RV strain in TBM CSF by indirect inhibition ELISA. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India
13. **Kainthla RP, Kashyap RS et al (2004)**. Effect of Hemidesmus indicus (Anantmool) extract on IgG production and ADA activity of human peripheral blood lymphocytes in vitro. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
14. **Ray Parthasarthi, Kashyap RS et al (2004)**. Immunomodulatory effect of Tinospora Cordifolia on the activities of cultured human lymphocyte. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
15. **Radhika SS, Kashyap RS et al (2004)**. Biological activity of protein antigen isolated from liquid culture filtrate of M. Tuberculosis for diagnosis of tuberculosis and TBM. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
16. **Anju AV, Kashyap RS et al (2004)**. Adenosine deaminase: A complimentary tool in the early diagnosis of tuberculous meningitis. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
17. **Agrawal MG, Kashyap RS et al (2004)**. Characterization of 30kD protein band observed in csf of Tuberculous meningitis. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
18. **Satpute RM et al (2004)**. Evaluation of Biomarkers in blood acute ischemic stroke patient. *73<sup>rd</sup> annual meeting of SBC Nov: 21-24*, Pantnagar, India.
19. **Singh A, Kashyap RS et al (2004)**. Electrophoretic protein profile study of human peripheral blood lymphocyte. *73<sup>rd</sup> Annual meeting of SBC Nov: 21-24*, Pantnagar, India.

20. **Kashyap RS, Kashyap RS et al (2004).** TBM patients without systemic focus of TB : case studies with experimental evidences . *73<sup>rd</sup> annual meeting of SBC Nov: 21-24, Pantnagar, India.*
21. **Taori GM, Kashyap RS et al (2004).** Demonstration of components of antigen 85 complex in CSF of Tuberculous meningitis. *Academy of Medical Sciences, Nagpur, India.*
22. **Kashyap RS et al (2004).** Differential Diagnosis of Tuberculous Meningitis from partially treated cases of pyogenic meningitis by Cell ELISA. *International Neuroscience Conference, May 6-8, Hyderabad, India*
23. **Kashyap RS et al (2005).** Proteomic approach to the diagnosis of acute ischemic stroke. *Meeting of Society of Biological Chemists, Lucknow, India.*
24. **Sweta Prasad, Kashyap RS et al. (2005).** Effect of Dhamasa (ayurvedic herbal preparation) on clot lysis, 74<sup>th</sup> annual meeting, society of biological chemists (India), November, 2005 (Abstract).
25. **Kainthla RP, Kashyap RS et al. (2005).** Cytotoxic effects of immunosuppressive drugs and environmentally relevant chlorophenols on human lymphocytes.Meeting of Society of Biological Chemists, Lucknow, India.
26. **Mudliar AV, Kashyap RS et al (2005).** Cellular immune response in tuberculous meningitis: Expression of 65kd antigen in cells isolated from CSF Symposium on “Cancer”, Hislop school of Biotechnology and Biotech Society, Nagpur.
28. **Sweta, Kashyap RS et al (2005).** Vascular endothelial growth factor:Interesting parameter in venous sinus thrombosis. Symposium on “Cancer”, Hislop school of Biotechnology and Biotech Society, Nagpur.
29. **Divya Chaudary, Kashyap RS et al (2005).** In vitro stimulation of T cell using M.tuberculosis antigen. Symposium on “Cancer”, Hislop school of Biotechnology and Biotech Society, Nagpur.
30. **Showkat Patni, Kashyap RS et al (2005).** The possible role of adenosine deaminase enzyme in the blood of patients with acute ischemic stroke. Symposium on “Cancer”, Hislop school of Biotechnology and Biotech Society, Nagpur.

31. **Anju N Rajan, Kashyap RS et al (2006)**. Expression of 65 kD heat shock protein of mycobacterium tuberculosis in Tuberculous infection. *International symposium on New frontiers in tuberculosis research, Dec 4<sup>th</sup> -6<sup>th</sup>*, Delhi, India.
32. **Kainthla RP, Kashyap RS et al (2006)** Study of interaction between cyclosporine A and herbal extracts on *in vitro* cultured human T-cells. *39<sup>th</sup> annual conference of the Indian pharmacological society, Dec 21<sup>st</sup> -23<sup>rd</sup>*, Jaipur, India.
33. **Sweta, Kashyap RS et al (2006)**. Study of thrombolytic effect herbal preparation through a newly developed clot lysis Model. *National seminar on emerging horizons on biotechnology, Nov 10<sup>th</sup> -12<sup>th</sup>*, Bilaspur, India.
34. **Sweta, Kashyap RS et al (2006)**. Study of various herbal preparations for clot lytic activity: an *in vitro* approach. *39<sup>th</sup> annual conference of the Indian pharmacological society. , Dec 21<sup>st</sup> -23<sup>rd</sup>*, Jaipur, India.
35. **Nayak AR, Kashyap RS et al (2006)**. Secretory factor of human neuroblastoma (IMR-32) AND human glioblastoma (U87MG) cell lines induce neurite outgrowths in PC-12 cells. *24<sup>th</sup> Annual conference of Indian academy of neuroscience, Dec 17<sup>th</sup> -20<sup>th</sup>*, Lucknow, India.
36. **Sweta M, Kashyap RS et al (2006)**. Study of interaction between cyclosporine A and herbal extracts on *in vitro* cultured human lymphocyte. *2<sup>nd</sup> Bio-tech congress 2006 AD, Nagpur, India.*
37. **Kashyap RS et al (2006)** Proteomic approach for the diagnosis of acute ischemic stroke, Indian Science.Congress, *93<sup>rd</sup> Indian Science Congress Association. January 3-7, Hyderabad, India.*
38. **Sweta Prasad, Kashyap RS et al (2006)**.Effects of various herbal preparations on thrombolysis: An *in vitro* approach on blood, *93<sup>rd</sup> Indian Science Congress, January 2006, Hyderabad.*
39. **Kainthla RP, Kashyap RS et al.** A study on toxic effect of Cyclosporin A, Cyclophosphamide and chlorophenols on human peripheral blood lymphocytes *in vitro*. January, 2006. Indian Science Congress, Hyderabad, India.
40. **Anju V Mudliar, Kashyap RS et al (2006)**. Diagnostic importance of 30kD and 65kD antigens of *Mycobacterium tuberculosis* in Tuberculosis.*93<sup>rd</sup> Indian Science Congress, Hyderabad.*

41. **Kashyap RS, et al (2007).** Diagnosis of chickungunya fever in Indian population with an indirect ELISA protocol based on antigen Detection assay: A prospective cohort study. *International Conference on Arthropod borne viral infections*, March 15-16, Bangalore, India.
42. **Amit Nayak, et al. (2008).** Secretory factor of human neuroblastoma (IMR-32) AND human glioblastoma (U87MG) cell lines induce neurite outgrowths in PC-12 cells *International Conference on Toxic Exposure related Biomarkers, 10<sup>th</sup> -11<sup>th</sup> Jan, 2008*, NEERI, Nagpur.
43. **Nayak AR, et al. (2008).** (Poster Presentation). *International conference on Neruopeptide*. Pharmacy Department, Nagpur University. Nagpur, 2<sup>nd</sup> -3<sup>rd</sup> Feb, 2008.
44. **Chourasia SR, et al. (2008).** Study of thrombolytic effect of herbal preparations. *“Symposium on Advances in Cerebrovascular Diseases.” 22<sup>nd</sup> August 2008.*
45. **Amit Nayak, et al. (2008).** Ashwagandha protects PC12 cells against sodium azide induce chemical ischemia. UGC sponsored state level symposium on “Current trends in cellular communication” *Organized by Hislop College. 26<sup>th</sup> -27<sup>th</sup> Sept 2008*, Nagpur, India.
46. **Nayak AR, et al. (2009).** “School of Neurosciences”. Workshop organized by the Indian Institute of Chemical Biology. 29<sup>th</sup> Dec 2008- 08<sup>th</sup> Jan 2009, Kolkata India
47. **Kashyap RS, et al. (2009).** Evaluation of ELISA based antigen detection kit for diagnosis of pulmonary and extra pulmonary tuberculosis (Poster Presentation). *International Symposium on Tribal health organized by Regional Medical Research Centre for Tribals* (Indian Council of Medical Research), Jabalpur (M.P.) 27 Feb -1<sup>st</sup> Mar, 2009.
48. **Deshpande P.S, et al. (2009).** Evaluation of Polymerase chain reaction assay for diagnosis of Herpes simplex virus I & II encephalitis. *International Symposium on Tribal health organized by Regional Medical Research Centre for Tribals (Indian Council of Medical Research)*, Jabalpur (M.P.) Feb 2009.
49. **Khushboo J. Nagdev, et al. (2009).** Diagnostic evaluation of polymerase chain reaction technique in different body fluids for detection of Tuberculosis infection. *International Symposium on Tribal health organized by Regional Medical Research Centre for Tribals (Indian Council of Medical Research)*, Jabalpur (M.P.) Feb 2009.
50. **Shweta H Morey, et al. (2009).** Development of Antigen detection based ELISA method for diagnosis of Chikungunya. *International Symposium on Tribal health organized by Regional*

*Medical Research Centre for Tribals (Indian Council of Medical Research), Jabalpur (M.P.)*  
Feb 2009.

51. **Sonali Ramteke, et al (2009)**. Diagnostic Application of CIIMS In house developed ADA kit for pulmonary and extrapulmonary tuberculosis. *International Symposium on Tribal health organized by Regional Medical Research Centre for Tribals (Indian Council of Medical Research), Jabalpur (M.P.) 27 Feb -1<sup>st</sup> Mar, 2009.*
52. **Kashyap RS, et al. (2009)**. Diagnosis of Chikungunya fever in an Indian population with an indirect ELISA protocol based on an antigen detection assay: A prospective cohort study. Conference on “*Molecular tools in Environmental Toxicology, 23<sup>rd</sup> – 24<sup>th</sup>, NEERI, Nagpur, September 2009.*
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75. **Shraddha Bhullar, Kashyap RS et al.** State level symposium and workshop on Role of bioinformatics in biomedical research, 17<sup>th</sup> – 19<sup>th</sup> December 2009, Nagpur, India.
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#### **List of Research Work for M.Sc Dissertation**

1. **2005**, Showkat Ahmad Patni, Evaluation of Biochemical markers in serum of acute Ischemic stroke patients and studies on Neuroprotection by adenosine in chemically induced ischemia on human neuronal cell lines In Vitro.
2. **2005**, Rahela Anjum, Establishment of CSF/Serum dilution by Indirect ELISA method for the diagnosis of TBM and TB.
3. **2005**, Priya Pradhan, Mata Gujari Mahila Mahavidyalaya, Jabalpur Developmental Procedure for Invitro Generation of Antibodies based on Human B-Lymphocytes Activation.
4. **2005**, Divya Chowdhary, Studies on the response of Human T and B Lymphocytes against M. tuberculosis antigen for development of Vaccines.

5. **2005**, Dhanashree Wadsamudrakar, Expression of Proteins In human Lymphocytes after sensitization with MTB Antigens.
6. **2006**, Rashmi Satyarthi, IFN- $\gamma$  Response to 30kD Protein antigen isolated from TBM CSF samples.
7. **2006**, Miss. Khushboo Nagdev, Application of Invitro produced polyclonal antibodies in Diagnosis of TB and TBM.
8. **2006**, Nirmala Lambodari, Protein expression of Monocytes after induction of M. Tuberculosis.
9. **2006**, Jagrati Parihar, Demonstration of 65kDa Heat shock protein in Tuberculosis patients.
10. **2008**, Anju V. Mudaliar, Significance of 65kD heat shock protein (HSP65) of Mycobacterium tuberculosis infection.
11. **2003-2004**, Anjali Kusumbe, Identification of Marker Protein (s) and prospective study to evalate reported markers (NSE, S-100 VEGF & CRP) in the serum of patients with ischemic stroke and traumatic brain Injury.
12. **2003-2004**, Moumita Goswami, Response of B Cells derived from CSF of TBM patients towards Immobilised CFP Antigen by IgG capturing ELISA.
13. **2003-2004**, Parthasarathi Ray, Immunomodulatory effect of Herbal Drugs Tinospora cordifolia on tne activities of cultured human lymphocytes.
14. **2003-2004**, Anju Mudaliyar, Identification of Protein markers for diagnosis of Tuberculosis Meningitis.
15. **2004-2005**, Siddham shetty Radhika, Biological Activity of Protein antigens isolated from the liquid culture filtrate of M.TB for dignosis of TBM.
16. **2004-2005**, Amit Singh, Electrophoretic Protein profile study of human periferal Blood Lymphocytes.
17. **2005-2006**, Shweta Morey, Study of Interaction between CyclosporineA and Herbs on in vitro Cultured Human Lymphocytes and effect of Mitogens on Lymhproliferation.
18. **2005-2006**, Ashish Wandhare, Proteomic approach to the diagnosis and prognosis of acute Ischemic Stroke.
19. **2005-2006**, G. Gajendar, Vascular Endothelial growth factor in Tuberculous Meningitis.

20. **2005-2006**, Varsh Kakroo, Correlation between Liquid Culture of M. Tuberculosis and PCR and Detection of M. tuberculosis Antigens in TBM Patients.
21. **2005-2006**, Reeta Katiyar, Reactivity of anti-BCG antibodies with M. Tuberculosis Antigen.
22. **2005-2006**, Pallavi Seth, Importance of Sample dilution for detection of M. Tuberculosis Antigen in TBM & TB Patients.
23. **2006-07**, Mridula Vellore, Evaluation of Heat shock proteins and ESAT-6 in tuberculosis patients.
24. **2006-2007**, Anuj Singh, Abhishek Guldhe, Pranay Dogra, Priyanka Hedao, Rajat Das, Phytochemical Analysis & Study Of Anticancer & Antimicrobial Activity Of Some Trifoliolate Plants.
25. **2006-2007**, Pooja Jaiswal, One Dimensional Electrophoretic analysis of Protein Expressed in Monocytes infected with M. Tuberculosis.
26. **2007-2008**, Gauri Deshpande, Expression of Heat Shock Protein 70 (DNAK) in pulmonary and extrapulmonary tuberculosis patients.
27. **2008-2009**, Sneha Manmode, Effect of Herbal Extraction on In-vitro cytokine Expression.
28. **2008-2009**, Supriya Thawkar, Modification of CIIMS-In house Developed ADA kit for Diagnosis of Tuberculosis.
29. **2008-2009**, Shraddha R. Dharskar, Comparative study of Ag-85 complexes for Ab detection in tuberculour Meningitis by indirect ELISA method.
30. **2009-10**, Rupali Gandhewar, Evaluation of Hyperimmune Sera in CSF and Serum Samples of Herpes Simplex Patients.
31. **2009-10**, Swapnil S. Muley, Diagnostic importance of Whole Cell Lysates (WCLs) obtained from MTB in TB infection.
32. **2009-10**, Sonali Gaikwad, Evaluation of Multiplex ELISA in diagnosis of Pulmonary and Extrapulmonary Tuberculosis.
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34. **2009-10**, Niharika Deodhar, Diagnostic application of CHIKV peptides in serum of Chikungunya patients.

35. **2009-11**, Sakchhi M.k. Shrivastav, Comparative analysis of antigen, IgM and IgG detection in Chikungunya Samples using E2 envelope glycoprotein peptides and antipeptides of Chikungunya virus.
36. **2009-2010**, Ruchika Jain, Expression of Host and Pathogen Heat shock Proteins in Tuberculous Patients.
37. **2009-2010**, Prapti Pratap Roy, Diagnostic Evaluation Of Screened Peptides from Dormancy Regulon Protein For Differential Diagnosis Of Latent from Active TB.
38. **2009-2010**, Rucha Lalingkar, Diagnosis of Bacterial Meningitis: Role of Broad Range 16S rRNA PCR.
39. **2010-2011**, Purva P. Ambadkar, Identification and Characterization of Heat Shock Proteins and cytokines in monocytic cell line.
40. **2010-2011**, Arti Kumari Choudhary, Evaluation of Antibody in Body fluids of Pulmonary and Extra Pulmonary Tuberculosis Patients.
41. **2010-2011**, Sapna Chaandrakar, Development of PCR based Qualitative and Quantitative technique for diagnosis of Bacterial Meningitis and Tuberculous meningitis.
42. **2010-2011**, Varsha Verma, IgG & IgM Analysis in CSF of HSE Patients against Newly Designed Peptides of Envelope Glycoproteins of HSV-1& HSV-2.
43. **2010-2011**, Shraddha Verma, Antigen & Antibody Profile in TB Subjects.
44. **2011**, Meena Verma, Identification & evaluation of potentially protective mycobacterium tuberculosis antigens as vaccines candidates using in vitro PBMC Model.
45. **2011**, Seema Rajput, Determination of time period for the release of secretory antigens of Mycobacterium tuberculosis H37Rv culture.
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49. **2012**, Neha Taori, Testing shelf life of in vitro produced polyclonal antibodies.

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51. **2012**, Pratiksha Sharma,
52. **2012**, Jitendra Sahu, Proteomic Profile of Pulmonary and Extra pulmonary TB samples and isolates.
53. **2012**, Monika Dengre, Protein profiling in blood samples of mice after single and booster dose of BCG, Ag 85 complex and it's peptides.
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## **List of national and international publications in peer reviewed journals**

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31. Rajpal S Kashyap, Shweta H Morey, Nitin H Chandak, Hemant J Purohit, Girdhar M Taori and Hatim F Daginawala. Detection of viral antigen, IgM and IgG antibodies in cerebrospinal fluid of Chikungunya patients with neurological complications. *BMC, Cerebrospinal fluid research*, 2010, 7:12. unofficial Impact factor 1.841
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