

## **CURRICULUM VITAE**

**NAME** : Dr. Saurabh Verma  
**DESIGNATION** : SCIENTIST C  
**NATIONALITY** : Indian  
**ADDRESS** : National Institute of Pathology-ICMR  
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### **Previous and Present Work Details:**

Since 2000, I have been working in National Institute of Pathology (ICMR), New Delhi . I started my exciting scientific career with research in the department of Pharmacology, Central Drug Research Institute, Lucknow from where I have completed my PhD thesis on Investigation on the role of nitric oxide in central cardiovascular regulation from ventral surface of medulla. After PhD, I joined the department of Physiology at All India Institute of Medical Sciences short term of 6 months and then moved to department of Psychiatry at AIIMS for about 2 years as Research Associate where we investigated the role of dopamine receptors in nicotine tolerant rats. In Nov. 2000, I had joined my present Institute as Scientist B and in 2005 as Scientist C where I established the lab for molecular work with sophisticated equipments like Flow Cytometer and Confocal Laser Scanning Microscope. Our lab in NIOP is mainly involved in exploring and evaluating certain novel biomarkers using applications like immunophenotyping, to identify certain extracellular proteins expressions, detection of intracellular cytokines, DNA content studies, study on apoptosis markers, Genomic and Epigenomic studies of human Cancer. Recently, I have submitted 3 new projects which include the evaluation of therapeutic potential of certain herbal extracts/compounds, identification of gene expression profiling in bladder cancer patients and evaluation of certain inflammatory cytokines in diabetic patients. I am actively involved in studying the novel markers and key regulatory proteins along with their prognostic significance in cancer patients, mainly urothelial cell carcinoma patients. We are also investigating the therapeutic significance of the novel markers studied. With the projects work, I am actively involved with teaching of MSc and PhD students and training programmes for WHO sponsored pathologists, advanced trainings for technicians and training for MSc students for their dissertation. The motto is to work with team spirit in a tandem to ameliorate the suffering of mankind.

### **Educational Qualification:**

| <b>Exam/Degree</b> | <b>College/University</b> | <b>Subjects</b> | <b>Year of passing</b> | <b>Class/Div/% age</b> |
|--------------------|---------------------------|-----------------|------------------------|------------------------|
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|   |                             |                            |      |       |
|---|-----------------------------|----------------------------|------|-------|
| <b>MSc</b>  | Lucknow University          | Zoology/                   | 1991 | FIRST |
| <b>*PhD</b>   | DR RML University, Faizabad | Zoology/ Neuropharmacology | 1999 | NA    |
| <b>*TITLE OF THESIS:</b> Neuropharmacological Investigation on the Role of Nitric Oxide in Central Cardiovascular Regulation from the Ventral surface of Medulla. |                             |                            |      |       |
| <b>* PLACE OF WORK FOR PhD:</b> CENTRAL DRUG RESEARCH INSTITUTE, LUCKNOW, UP., INDIA  |                             |                            |      |       |

## Professional Experience and Fellowships:

| Name of Employer/ Organization                             | Post held               | Time Period          | Nature of Duties                             |
|--|-------------------------|----------------------|--|
| National Institute of Pathology, ICMR, New Delhi           | Scientist C             | Nov. 2005- Till date | Research, Teaching and Administrative duties |
| National Institute of Pathology, ICMR, New Delhi           | Scientist B             | Nov. 2000- Nov.2005  | Research, Teaching and Administrative duties |
| All India Institute of Medical Sciences (AIIMS), New Delhi | Research Associate      | March1999- Nov. 2000 | Research                                     |
| Central Drug Research Institute (CDRI), Lucknow            | SRF                     | Apr1997-Sept1998     | Research                                     |
| Central Drug Research Institute (CDRI), Lucknow            | Research Assistant/ JRF | Nov.1992- Mar 1997   | Research                                     |

## Awards and Others:

1. **Prof. S.S. Parmar award** for best paper on research paper titled, "Sensitivity of iontophoretically applied Clonidine onto Ventrolateral Medullary Neurons" in XIX Annual Meeting of Indian Academy of Neurosciences and International Symposium on Neurodegeneration & Neuroprotection on 18-20<sup>th</sup> March, 2002 at Institute of Chemical Biology, Kolkata. The study of this research paper is taken from my thesis entitled, "Neuropharmacological Investigation on the Role of Nitric Oxide in Central Cardiovascular Regulation from the Ventral surface of Medulla."

2. **Special Appreciation Award** to paper titled, "Flow Cytometric analysis of Th1 and Th2 cytokines as immunological dysfunction in the patients of superficial transitional cell carcinoma" in 24<sup>th</sup> annual convention of Indian Association for Cancer research (IACR) and International symposium on Human Papillomavirus and Cervical Cancer which was held on 9-12 Feb, 2005 at Institute of Cancer Preventive Oncology (ICPO).

## Association with Scientific Projects:

### A. AS PRINCIPAL INVESTIGATOR: [Completed]

1. Flow Cytometric DNA analysis and cytological diagnosis of pleural effusions (2001-2003)

2. To study the host immune response in patients of superficial TCC of bladder (2002-2005)
3. To study the expression and relevance of tissue transglutaminase in superficial and invasive human bladder Transitional Cell Carcinoma (TCC) (2004-2007).
4. To study the expression of cyclooxygenase-1 and Cyclooxygenase-2 (Cox-1 and Cox-2) in correlation with cytokine dysfunction in invasive and non invasive TCC of human. (2007-2011)

#### **B. AS PRINCIPAL INVESTIGATOR: [NEW PROJECTS]**

1. Evaluation of Th17 cytokines in diabetes mellitus. **[Submitted to CSIR, 2013].**
2. To study antitumour potential of Centella asiatica on the human urothelial bladder cancer stem cells **[Submitted to DBT, 2013].**
3. Micro array based gene expression analysis in urothelial cell bladder carcinoma. **[Submitted to ICMR, 2013]**

#### **C. AS CO-INVESTIGATOR: [Completed]**

1. An invitro model to predict chemotherapeutic response in acute leukemia [1999-2003].
2. Cytokine regulation in the immunopathogenesis of salpingitis/infertility due to Chlamydia trachomatis infection in woman [1999-2005].
3. Evaluation of estrogen (ER) and progesterone receptor in the male reproductive tract of mice [1999-2002].
4. Evaluation of estrogen receptors (ER) and progesterone receptors (PR) in the human spermatozoa from fertile subjects [1999-2002].
5. Evaluation of the profile of androgen receptor and estradiol modulated proteins in the ejaculated spermatozoa from fertile and infertile subjects [1999-2001].
6. Apoptotic cell population as a marker to predict induction of remission in patients with acute leukemia [2001-2004].
7. Role of invitro cytotoxicity, assessment and immunologic enhancement in the management of superficial bladder cancer [2002-2004].
8. Role of in vitro cytotoxicity assay and adjuvant intravesicle therapy in the management of superficial bladder cancer [2001-2005].
9. Study of tumour markers in patients of superficial TCC of bladder [2001-2006]
10. FlowCytometric assays to evaluate the prognosis and patients response to chemotherapy in patients with acute leukemia: expression of genes commonly involved in drug resistance. [2003-2006]
11. Flow Cytometric assay to correlate in vitro cellular toxicity with resistance to chemotherapeutic agents in patients with acute leukemia.
12. Microbial Epithelial Interaction in Innate Immune Response to Tuberculosis and its Role in Transcriptional Regulation of Inducible Nitric Oxide Synthase(iNOS).

13. Antimicrobial and immunomodulatory effects of Tulsi (ocimum sanctum Linn) on healthy human subjects [2007-2012]

14. To study the anti apoptogenic activity of Curcuma oil in Transient Focal Ischemia in Rat Brain.

15. Characterization of host immune factors associated with progression of superficial TCC of bladder by microarray analysis [2009-2012].

#### **D. AS CO-INVESTIGATOR: [ON-GOING]**

1. **Co Investigator** in DST project titled, "Immunogenetic profile of nasopharyngeal cancer in a high-prevalence region of North-East India(2010-2013).

### **Guide/ Co-Guide for PhD/ DM/ MSc/ DNB Thesis:**

#### **A. Doctorate of Medicine (D.M.): [Completed]**

1. **Co-Investigator:** D.M. thesis titled "Levels of CD4+CD25+ regulatory T cells in Rheumatic heart disease" was completed and submitted by Dr Sandeep Gade, Senior Resident, Department of Cardiology, GB Pant Hospital, New Delhi at University of Delhi, 2012.

2. **Co-Invetigator:** D.M. thesis titled, "Circulating levels of regulatory T cells in rheumatic heart disease" (in continuation). The thesis protocol is submitted by Dr Mohan Kumar, Senior Resident, Department of Cardiology, GB Pant Hospital , New Delhi.

#### **B. Doctorate of Medicine (D.M.): [On going]**

2. **Co-Investigator:** D.M. Thesis protocol titled, " Circulating levels of T cells and pro/anti-inflammatory cytokines in coronary artery diseases in North Indian population" is submitted by Dr Hariram Maharia at department of cardiology, GB Pant Hospital, New Delhi.

#### **C. PhD Thesis: [Completed]**

1. **Co Guide:** PhD Thesis titled, " Antimicrobial and Immunomodulatory effects of Tulsi (ocimum sanctum Linn.) was completed and submitted by Shankar Mondal at Department of Physiology, All India Institute of Medical Sciences(AIIMS), New Delhi, Feb. 2010.

#### **D. MSc Dissertations: [Completed]**

1. **Supervisor** in the dissertation of Mr. Santosh Sharma, MSc Biochemistry from Jeevaji University. The title of dissertation was "Flow Cytometric evaluation of DNA content analysis and therapeutic responses (in vitro cytotoxicity) in superficial bladder carcinoma" with the objectives to evaluate DNA ploidy in bladder cancer samples as prognostic indicator and to correlate it with tumour grading and cytotoxicity assay of same samples. The dissertation was submitted in june, 2004.

2. **Supervisor** in dissertation report of Ms Priyanka Badoniya, MSc Biocemistry from Jeevaji university. The title of dissertaion was "Study on ex[ression and Correlation of estrogen Receptor, p-Glycoprotein and Tissue transglutaminase in Human Breast Cancer" submitted in june, 2005

3. **Supervisor in** MSc dissertation titled, "The study of Immunoexpression of tissue Transglutaminase in Brain tumour" by Miss Umang Srivastava, Msc (Biochemistry) from the Jivaji Universtity, Gwalior was submitted in june 2006.

4. **Supervisor in** MSc dissertation titled, " Flow Cytometric study of surface antigen markers (CD3, CD4 and CD8) and DNA content analysis in Breast Cancer patients" by Mr Rishikesh Shukla, MSc (Microbiology), Jeewaji University Gwalior was submitted in June 2007.

**5. Supervisor** in MSc dissertation titled, "FlowCytometric study of Cox-1 and Cox-2 expression in correlation with cytokines dysfunction in Transitional Cell carcinoma(TCC) patients" by Miss Swarna Saxena, Department of Biochemistry, Jeevaji University, Gwalior was submitted in June 2008.

**6. Supervisor** in MSc dissertation titled, "Immunofluorescence and Immunohistochemistry based studies on Cox-2 Expression in Breast and Prostate Cancer Patients." by Miss Priynaka, School of studies in Microbiology, Jeevaji University, Gwalior was submitted in June 2009.

**7. Supervisor** in MSc dissertation titled, "Advanced technological applications in Research and Medical Sciences". By Miss Rudrakshi Munshi, Department of Biotechnology, Amity University, Noida was submitted in July 2009.

### **E. DNB Thesis: [Completed]**

**1. Co supervisor** in DNB thesis titled, "Correlation of DNA content and grading in soft tissue tumour". Submitted by Dr. Hemant Kapoor for the partial fulfilment of Diploma of National Board (DNB), New Delhi during the year 2004.

**3. Co supervisor** in DNB Thesis titled, "Study of Tumour markers in superficial transitional Cell Carcinoma of the Bladder using Confocal Laser Scanning Microscope." was successfully completed by Dr Payal Salgia in Dec, 2005 at IOP

## **Publications:**

### **A. RESEARCH PAPERS:**

1. Nitric oxide modulation of cardiovascular responses from ventral surface of medulla in cat. **S.Verma**, R. Raghubir and G.K. Patnaik. Ind. J. Pharmacol. 29, 125-128, 1997.

2. Synthesis and opioid activity of novel dermorphin related heptapeptide. R. Raghubir, T.Naqvi, **S.Verma**, W.HAq, K.B.Mathur and G.K. Patnaik. Med. Chem. Res., USA. 7, 16-24, 1997.

3. Effect of selective dopaminergic drugs in nicotine tolerant rats. R. Jain, **S.Verma** and D. Mohan, Drug. Alcohol. Depend. 63, S72 (2001).

4. Enhanced immunocompetent cells in chlamydia cervicitis. Mittal,A, Rastogi,S, Reddy,BS, **Verma,S.**, Salhan,S. and Gupta,E. J. Reprod. Med (USA), **49**(8), 671-677, 2004(Aug)

5.. Cytokine expression pattern in the genital tract of *Chlamydia trachomatis* positive infertile women implication for T-cell responses. Reddy, BS, Rstogi,S, Das,B, Salhan,S, **Verma,S** and Mittal,A. Clin Exp. Immunol. **137**, 552-558, 2004.

6. FlowCytometric DNA analysis and cytological diagnosis of pleural effusions. Veena kashayap and **S.Verma**. Ind. J. Cytology , 21(3), 120-123, 2004.

7Flow Cytometric analysis of Th1 and Th2 cytokines in PBMCs as a parameter of immunological dysfunction in patients of Superficial Transitional cell carcinoma of bladder. Agarwal S, **Verma S**, Burra U, Murthy NS, Mohanty NK and Saxena S. Cancer Immunol Immunother, 55(6), 734-43, Jun 2006.

8. Nanotechnology.**Saurabh Verma**. IOP News Letter, Vol. 5 No. 2, April 2006

9. Limitation of FAB diagnosis in acute leukemia. Bhushan B, Saluja S, Ahuja D, **Verma S**, Gupta D K, Kapur S. J Cancer Res Ther, 2 (1), S 22, 2006.

10. Relation of Cell Viability and Apoptosis with Clinical Remission following Induction Chemotherapy in ALL and AML. B. Bhushan, D. Ahuja, **S. Verma**, S. Saluja, S. Siddiqui, S. Kapur. Journal of experimental and Clinical Cancer Research, 26,3, 313-321, 2007.

11. Pulmonary epithelial cells are a source of interferon- $\gamma$  in response to Mycobacterium tuberculosis infection. Monika Sharma, Sadhna Sharma, Sugata Roy, **Saurabh Varma** and Mridula Bose. Immunology and Cell biology, Apr-May 85(3), 229-237, 2007.

12. Malignant nodular hidradenoma with angiolymphatic invasion: a case report. Singh Arvinder, Sharma Shruti, **Verma Saurabh**, Khanna Arti. 50(3), 548-549, 2007

13. Curcuma oil: reduces early accumulation of oxidative product and is anti-apoptogenic in transient focal ischemia in rat brain. Priyanka Rathore, Preeti Dohare, **Saurabh Verma**, Aprajita E Ray, NR Jaganathan, Madhur Ray. Neurochemical Research, 33, 1672-1682, 2008.

14. Curcuma oil modulates the nitric oxide system response to cerebral ischemia.reperfusion injury Preeti deohare, **Saurabh Varma** and Madhur Ray. Nitric Oxide, 21, 1-11, 2008.

15. The neuronal apoptic death in global cerebral ischemia in gerbil:important role sodium channel modulator. Manoja Kumar Brahama, Preeti deohare, **Saurabh Varma**, Srikanta Kumar Ratha, Puja Garg, Prasanta kumar Biswal, Piyali Dhar Chowdhary and Madhur Ray. J Neurosci Res, **87**(6):1400-1411, 2009 May 1.

16. Serum Th1 and Th2 cytokines balance in patients of superficial transitional cell carcinoma of bladder pre and post intravesicle combination therapy. Agarwal A, Agrawal U, **Verma S**, Mohanty NK, Saxena S. Immunopharmacol Immunotoxicol Jun;32(2):348-56.2010.

17. Aberrant phenotypes in childhood and adult acute leukemia and its association with adverse prognostic factors and clinical outcome. Bharat Bhushan, Pradeep S Chauhan Sumita Saluja, **Saurabh Verma**, Ashwani K Mishra, Saeed Siddiqui, Sujala Kapur, in Clin Exp Med. 10(1):33-40, Mar. 2010

18. Mutation of FLT3 gene in acute myeloid leukemia with normal cytogenetics and its association with clinical and immunophenotypic features. Pradeep S Chauhan , Bharat Bhushan, Ashwani K Mishra, LC Singh, Sumita Saluja, **Saurabh Verma**, DK Gupta, Vishakha Mittal, Sumita Chaudhry, Sujala Kapur Med Oncol. Jun; 28(2): 544-51, 2011

19. Effects of Tulsi (Oscimum sanctum Linn) on immune parameters of healthy volunteers. S. Mondal, VD Bamola, **S. Varma**, SN Naik, BR Mirdha, N. Mehta, MM Padhi, SC Mahapatra. Journal Pharmacy and Pharmacology, 62, 10, 1486-1487, 2010.

20. Role of Tumour suppressor and angiogenesis markers in prediction of recurrence of non muscle invasive bladder cancer. Usha Aggarwal, AK Mishra, Payal Salgia, **Saurabh Verma**, NK Mohanty, S.Saxena. Pathol and Oncol Res. 17(1), 91-100, 2011.

21. Double-blinded randomized controlled trial for immunomodulatory effects of Tulsi (Ocimum sanctum Linn) leaf extract on healthy volunteers. Shankar Mondal, **Saurabh Varma**, Vishwa Deepak Bamola, Satya Narain Naik, Bijay Ranjan Mirdha, Madan Mohan Padhi, Nalin Mehta, Sushil Chandra Mahapatra. Journal of Ethanopharmacology, 136, 452-456, 2011.

22. Regulatory T cell deficiency in rheumatic heart disease: A preliminary Observational study. Saibal Mukhopadhyay, **Saurabh Verma**, Sandeep gade Yusuf jamal, Vijay Trehan, Sanjay Tyagi,. Journal of Heart Valve Disease, 22, 118-125, 2013

### **Communicated:**

1. The effect of Nitric oxide on synaptic activity of ventro lateral medullary neuronal responses. **S. Verma**. Communicated to European Journal of Pharmacology, 2013.

### **B. MONOGRAPH/ BOOKS:**

1. Immunofluorescence based study on breast cancer patients: Flowcytometric study on surface antigen markers (CD3, CD4 and CD8) and DNA content analysis in breast cancer. **S. Varma** and Rishikesh Shukla. Lambert Academic Publications, Germany, 2010
2. DNA content analysis and invitro cytotoxicity in bladder cancer patients: Flow cytometric evaluation of DNA content analysis and therapeutic responses (in vitro cytotoxicity) of transitional cell carcinoma patients. **S. Varma**. Lambert Academic Publications, Germany, 2010.
3. Tissue Transglutaminase (tTG) expression in human brain tumours: An immunohistochemical study. **S. Varma** and Anwasha Mallik. Lambert Academic Publications, Germany, 2011
4. Study on COX-2 Expression in Breast & Prostrate Cancer patients: Flow Cytometric and IF analysis of Cox-2 expression. **S. Varma** and Anwasha Mallik. Lambert Academic Publications, Germany, 2012.

### Membership of Professional Societies:

1. Member of Indian Pharmacological Society (IPS), India
2. Member of Indian Academy of Neurosciences (IAN), India
3. Member of International Brain Research Organization (IBRO), Paris, France.
4. Member of Indian Association for Cancer Research.

### TRAININGS:

1. Lecture on "General principle of Confocal Microscopy and META" on 18.4.02 by Solveig Hehl, Zeiss Co., Germany at Jawahar Lal Nehru University , New Delhi.
2. Immunohistochemistry workshop 2002 on 9-10<sup>th</sup> April, 2002 at Apollo Hoispital, New Delhi.
3. Lecture on "Laser Microdissection and Laser tweezers" by Dr Kelwin Schultz of PALM Microlaser Technologies on 20<sup>th</sup> June, 2002 at Hayatt Regency, New Delhi.
4. One day workshop on microprocessor and Microtome by Labcon on 22.10.02.
5. Workshop on Confocal Laser Scanning Microscopy from 7-8 April, 2003 at Tuberculosis Research Centre, Chennai.
6. Attended Computer training in data analysis on SPSS and other statistical packages from 21<sup>st</sup>-25<sup>th</sup> July, 2003 at Institute for Research in Medical Statistics at ICMR Headquarter, New Delhi.
7. Participated in 3<sup>rd</sup> Indo-US workshop on application of flow Cytometry in drug Mechanics from 15-19<sup>th</sup> September, 2003 at Regional Research Laboratory, Jammu.

### CONFERENCES/ WORKSHOPS:

#### \*NATIONAL CONFERENCES / SYMPOSIUM ATTENDED:

1. Presented a research paper in the 12<sup>th</sup> annual conference of Indian Academy of Neurosciences on Jan. 15-16, 1994 at MLB Medical College, Jhansi, U.P.
2. Attended the 27<sup>th</sup> annual conference of Indian Pharmacological Society on Nov. 21-24, 1994 at GK Seth Medical College, Bombay.
3. Participated and presented a research paper in 28<sup>th</sup> annual conference of Indian Pharmacological Society on Nov. 23-26<sup>th</sup>, 1995 at Punjabi University , Patiala.
4. Attended and presented research paper in 29<sup>th</sup> annual conference of Indian Pharmacological Society on 20-22<sup>nd</sup> Dec., 1996 at Deccan College of Medical Sciences, Hyderabad.
5. Participated and presented a research paper in trideccanial annual conference of Indian Pharmacological Society on 14-16<sup>th</sup> Dec., 1997 at Government Medical College, Jammu.

6. Attended ICMR-WHO workshop on use of Information Technology in Biomedical Sciences Research on 13-15 Dec., 2000 at Institute of Pathology (ICMR), New Delhi.
7. NIC-ICMR training programme on Emerging Technologies for Effective Management of Library and Information services on 12-16<sup>th</sup> Feb., 2001 at NIC Pune.
8. Attended symposium on human Chlamydial Infection on 27<sup>th</sup> July, 2001 at Institute of Pathology, New Delhi.
9. Attended silver jubilee meeting of Indian Association of Medical Microbiology on 21-22 Nov, 2001 at All India Institute of Medical Sciences, New Delhi.
10. Attended 50<sup>th</sup> Annual Conference of IAPM (Indian Association of Pathologists and Microbiologists) on 14-16<sup>th</sup> Dec, 2001 at Nehru Centre , Mumbai
11. Attended and presented paper in XIX Annual meeting on Indian Academy of Neurosciences and International Symposium on Neurodegeneration and Neuroprotection on 18-20<sup>th</sup> March, 2002 at Institute of Chemical Biology, Kolkata.
12. Immunohistochemistry workshop 2002 on 9-10<sup>th</sup> April, 2002 at Apollo Hospital, New Delhi, India.
13. Workshop on Confocal Laser Scanning Microscopy from 7-8 April, 2003 at Tuberculosis Research Centre, Chennai.
14. Attended Computer training in data analysis on SPSS and other statistical packages from 21<sup>st</sup>-25<sup>th</sup> July, 2003 at Institute for Research in Medical Statistics at ICMR Headquarter, New Delhi.
15. Participated in 3<sup>rd</sup> Indo-US workshop on application of flow Cytometry in drug Mechanisms from 15-19 September, 2003 at Regional Research Laboratory, Jammu.
16. Participated in 23<sup>rd</sup> Annual Convention of the Indian Association for Cancer Research and presented paper titled, " Flow Cytometric DNA analysis of Cytological diagnosis of Pleural Effusions." On 29-31<sup>st</sup> January, 2004 at Advanced Centre for Treatment, Research & Education in Cancer, Navi Mumbai.
17. Attended a workshop on cytogenetics workstation at Hotel Parkland, Safdarjung Enclave, New Delhi on 5<sup>th</sup> May, 2011.
18. Foundation workshop in clinical and laboratory medicine research" for UG medical students from 26<sup>th</sup>-28<sup>th</sup> July, 2011 at NIOP.
19. Wiley Blackwell and ICMR organized THE COCHRANE LIBRARY WORKSHOP on Sept 5, 2011 at NIOP, New Delhi.
20. Participated as Faculty to train the technicians in WHO training for advanced technical course for the technicians from 24<sup>th</sup> Nov, 2011 to 23<sup>rd</sup> Dec, 2011.
21. As Principal Investigator presented project titled " Evaluation of Th17 cytokine in diabetes mellitus" before ethical committee on 21/12/11 at Conference room, Dean office, Maulana Azad Medical College, Delhi.
22. As faculty participated in Lecture presentation and training for undergraduate students (4) of MBBS from Dept of pathology, Govt medical college Amritsar on 8<sup>th</sup> Feb, 2012.
23. As faculty participated in Lecture presentation and training session on special techniques for the Post Graduate (MD Pathology) students , department of pathology from Govt Medical College, Amritsar at NIOP on 15/2/12.
24. Organized a lecture cum presentation for faculty and students on "Individual cell sorting with Dielectrophoretic (DEP) array" by Dr Varun Kumar from Mars Bioanalytical Pvt Ltd on 14/2/12 at NIOP.
25. Organized training session on Flow Cytometer (Calibur and FACS Aria) for students and faculty at NIP. The training sessions were held from 15-17 Feb, 2012.
26. Attended workshop on Workshop on Scholarly Publishing held at National Institute of Pathology, ICMR auditorium on 21<sup>st</sup> September 2012.
27. Participated as scientific faculty and delivered lecture on FACS in workshop on research methodologies for medical scientists held from 9-12<sup>th</sup> Oct, 2012 at NIP, New Delhi.
28. Participated in workshop on "analysis of biological networks" organized by DBT from 6-7<sup>th</sup> Nov., 2012 at IIT Guwahati
29. Participated and delivered guest lecture on "Applications of Flow Cytometer" in National Conference on Innovations in Ethnopharmacology on Recent Developments in Biological and Chemical Sciences for Societal Benefits held on 1<sup>st</sup>- 3<sup>rd</sup> March, 2013 Organized by Department of Zoology, L. S. M. Govt. Post Graduate College, Pithoragarh, Uttarakhand

**\*INTERNATIONAL CONFERENCES/ SYMPOSIUM ATTENDED:**



1. Attended and presented a research paper in the International Symposium on the perspective in Biomolecular Research on 12-13 Jan., 1998 at the Central Drug Research Institute, Lucknow,
2. Participated and presented a research paper in The International Congress on Frontiers in Pharmacology and Therapeutics in 21<sup>st</sup> Century on 1-4 Dec., 1999 at New Delhi, India.
3. Attended International Symposium on Sudershan Kriya, Pranayam and Conciousness on 2<sup>nd</sup> and 3<sup>rd</sup> March, 2002 at All India Institute of Medical Sciences, New Delhi, India.
4. Attended and participated in 3<sup>rd</sup> Indo-US workshop on Flow Cytometry and Drug Mechanistics held on 15-19 Sept., 2003 at RRL, Jammu.

#### **ADMINISTRATIVE DUTIES:**

##### **Consultancy Assignments:**

Consultancy regarding the work plan, protocol, experimental work, standardization of techniques given in the various studies carried out side the NIOP.

Member in institutional committee of

- a. Member of Interview panel for the selection of students doing PhD in Institute.
- b. Member of Condemnation committee.
- c. Member of Physical verification of the Institute property committee
- d. Member Tender opening Committee
- e. Officer-in-Charge of Institute Maintenance Committee.
- f. Member of Institute library Committee

#### **TEACHING COURSES:**

1. WHO-Health Ministry sponsored basic level training for lab Technicians.
2. WHO-Health Ministry sponsored advance level training for lab Technicians.
3. WHO-Health Ministry sponsored training for pathologists.
4. As Faculty for teaching course of PhD students registered at NIOP

Faculty member for

5. Kishore vagyanic protsahan awardees of ICMR.
6. Students from Rohtak Medical College.
7. Research Programme on Research Management and Research Information for scientists from Nepal Health Research council, kathmandu on 23.10.02

## ABSTRACTS:

### \*ABSTRACTS:

1. Evidence for involvement of nitric oxide in central cardiovascular regulation from ventral surface of medulla in cat. **S. Verma** and R. Raghbir. **Ind. J. Pharmacol.** 26 (1), 69, 1994.
2. Lack of evidence for the involvement of nitric oxide-cGMP pathway in the antihypertensive effect of clonidine. **S. Verma** and R. Raghbir. Paper was presented in the 12<sup>th</sup> annual conference of Indian Academy of neurosciences on 15-16<sup>th</sup> Jan., 1994 at MLB Medical College, Jhansi.
3. Attenuation of opioid tolerance by nitric oxide synthase inhibitor L-NAME. **S.Verma** and R. Raghbir. **Ind. J. Pharmacol.** 27 (1), 64, 1994. It was appreciated as the best paper of the Scientific Session.
4. Modulation of cortical synaptic activity. **S. Verma** and R. Raghbir. Paper was presented in the 29<sup>th</sup> annual conference of Indian Pharmacological Society on 20-22<sup>nd</sup> Dec., 1996 at Deccan College of Medical Sciences, Hyderabad.
5. Elucidation of possible neuronal mechanism of action of centhaquin. **S. Verma** and R. Raghbir. Research paper was presented in the trideccanial annual conference of Indian Pharmacological Society on 14-16<sup>th</sup> Nov., 1997 at Government Medical College, Jammu
6. Sensitivity of medullary neurons to iontophoretically applied nitrgergic drugs. R. Raghbir and **S. Verma**. Paper was presented in the trideccanial annual conference of Indian Pharmacological Society on 14-16<sup>th</sup> Nov., 1997 at Govt. Medical College, Jammu.
7. Nitric oxide modulation of cortical synaptic activity in rats. **S. Verma** and R. Raghbir. Research paper was presented in International symposium on perspective in biomolecular research on 12-13 Jan., 1998 at Central Drug Research Institute, Lucknow.
8. Neuronal responses of antihypertensives are not mediated by nitric oxide. **S.Verma** and R.Raghbir. Research papere was presented in International Congress on frontiers in Pharmacology and Therapeutics in 21<sup>st</sup> Century on 1-4 Dec., 1999 at New Delhi, India.
9. Effect of selective Dopaminergic drugs in Nicotine Tolerant Rats. Raka jain, **S.Verma** and D.Mohan. *Drug and Alcohol Dependence*, **63** (1), June 2001.
10. Flow Cytometric assays for the diagnosis and detection of apoptosis in acute leukaemia.S.Kapur, D.Ahuja, **S.Verma**, S.Saluja, A.Mittal, A.Mukherjee was presented in 50<sup>th</sup> Annual Conference of IAPM (Inadian Association of Pathologists and Microbiologists) on 14-16<sup>th</sup> Dec, 2001 at Nehru Centre, Mumbai.
11. Sensitivity of iontophoretically applied Clonidine onto Ventrolateral Medullary Neurons in XIX Annual Meeting of Indian Academy of Neurosciences and International Symposium on Neurodegeneration & Neuroprotection on 18-20<sup>th</sup> March, 2002 at Institute of Chemical Biology, Kolkata.
12. Correlation of cell survival with clinical remission in adult and childhood acute leukemia. Bhushan B, Kapur S, Saluja S, Ahuja D, **Verma S**. Proceedings of the 52<sup>nd</sup> Annual Conference of Indian Association of Pathologists & Microbiologists, India, 2003.
13. Occurrence of mixed lineage immunophenotype in patients with acute leukemia. Ahuja D, Kapur S, **Verma S**, Bhushan B, Saluja S. Proceedings of the 18<sup>th</sup> Annual Conference of Indian Association of Pathologists & Microbiologists (Delhi Chapter), India, 2003.
14. Apoptotic cell population as a marker to predict induction of remission in patients with acute leukemia. Kapur S, Ahuja D, Bhushan B, **Verma S**, Saluja S. Proceedings of the ONCON 2K3, Indo American Cancer Institute and Research Centre, Hyderabad, India, 2003.
15. Flow Cytometric DNA analysis of Cytological diagnosis of Pleural Effusions. On 29-31<sup>st</sup> january, 2004 at Advaced Centre for Treatment, Research & Education in Cancer, Navi Mumbai.
13. Limitation of French, American and Bristish (FAB) diagnosis in acute leukaemia. Bharat Bhushan, Sunita saluja, Deepa ahuja, **Saurabh Verma**, Sumita Bhasin, DK Gupta, Sujala kapur.
15. Limitation of FAB diagnosis in acute leukemia. Bhushan B, Saluja S, Ahuja D, **Verma S**, Gupta D K, Kapur S. *J Cancer Res Ther*, 2 (1), S 22, 2006.
16. Aberrant expression of lineage associated antigens in acute leukemia: A flow cytometric study. Chauhan P S, Bhushan B, **Verma S**, Saluja S, Kapur S. Proceedings of 27<sup>th</sup> Annual Convention of Indian Association for Cancer Research (IACRCON 2008), Ahmedabad, India, 2008.
17. Immunophenotypic and clinical findings in adult Acute Myeloid Leukemia with FLT3 Internal Tandem Duplication. Chauhan P S, Bhushan B, **Verma S**, Saluja S, Sharma M, Mishra A K, Mittal V, Kabra M, Kapur S. Proceedings of 13<sup>th</sup> Human Genome Meeting (HGM 2008), Hyderabad, India, 2008.

18. Expression of Ki67 as a prognostic indicator in acute leukemia. Pradeep Singh Chauhan, Bharat Bhushan, **Saurabh Verma**, Sumita Saluja , Monica Sharma , Ashwini kumar Mishra,Vishakha Mittal , Meghana Kabra, Sumita Bhasin , Dipendra Kumar Gupta , Sujala Kapur in " National Conference on Emerging Trends in Life Sciences Research from March 6<sup>th</sup> & 7<sup>th</sup>, 2009 at BITS, Pilani , Rajasthan, India
19. Levels of CD4+/CD25+ T regulatory cells in Rheumatic mitral stenosis. Sibal Mukhopadhyaya, **Saurabh Varma**, Jamal Yusuf, Vimal Mehta, Sandeep Gade, Srikanth Nathani, Sanjay Tyagi was presented in annual meeting of cardiology society of India, Dec 2010, Kolkatta.