

Chander Kanta Gupta, M.Sc.

17821 Stoneridge Dr., Gaithersburg, MD 20878

Telephone (Home): 240 246 0126

Telephone (Mobile) 240 423 8148

Email kantacg@yahoo.com

Profile

Research Scientist with experience in analytical methods development, qualification and validation, particularly in bioassays (toxin and virus titrations, plaque assays, neutralization assays), immunochemical methods (ELISA, Precipitation reactions, SRID, immuno-blot), molecular biology (SDS-PAGE, PCR, QPCR), bio-analytical methods (Chromatography methods of bio molecules), tests in animals (mice, guinea pigs, rabbits, monkeys); and expertise in virology & cell culture (development of vaccines, preparation of virus stocks, cell banks, etc.); worked in research, quality control, analytical development, GLP & GMP environments

Education

M. Phil. (Microbiology) Himachal Pradesh University, India

M. Sc. (Microbiology) Himachal Pradesh University, India

B.Sc. (Chemistry, Botany, Zoology) Government College, Himachal Pradesh University, India

Professional Experience

2006- 2011 Scientist I, Intercell/Iomai Vaccines, Gaithersburg, MD

- Development, qualification and validation of biological methods (bioassays) for characterization and release testing of vaccines.
- Preparation, maintenance and characterization of cell banks used in testing
- Generation of SOPs, protocols, reports and batch records
- Supported formulation and manufacturing groups in developing methods and performing testing

2003- 2006 Not worked due to Personal and Family Reasons

1998-2003 **Senior Research Scientist I**, Wyeth Research, Pearl River, NY

- Team Leader- RSV GMP Vaccine Development Team (**Wyeth Team Award 2002**)
- Purification of RSV virus vaccine candidates by Terminal Dilution Procedure
- Maintenance and Propagation of Cell Cultures
- Testing of Purified Viral Clones for Virus titer, Identity, Attenuation, etc.
- Aseptic Techniques in viral operations and manual filling of standards & controls

1997-1998 **Research Scientist**, Wyeth-Lederle Vaccines & Pediatrics, Pearl River, NY

- Purification of *B. pertussis* antigens (Fimbriae and 69K protein)
- Analytical and Immunochemical methods to characterize pertussis antigens
- Identification of lactate dehydrogenase by SDS-PAGE and isoenzyme staining

1991-1996 **Research Scientist**, Massachusetts Public Health Biologic Labs, Boston, MA

- Development of micro neutralization test for poliovirus antibodies based on metabolic-inhibition so that the end points can be read on an ELISA reader.
- Development of ELISA-based micro neutralization test for quantitation of antibodies to cytomegalovirus (CMV) and measles virus.
- Development of an ELISA for quantitation of IgG subclass antibodies.
- Study on the role of IgG subclass antibodies to CMV in neutralization of virus.
- Correlation between IgG antibodies to CMV and neutralizing antibodies.
- Feasibility study on the preparation of measles immune globulin.
- Purification of respiratory syncytial virus from defective interfering particles and stabilization of the virus for more than 3 years.
- Purification of RSV by chromatography for development of vaccine and evaluation of RSV vaccine in animals for humoral and cellular immune responses.
- Potency testing of immune globulins for polio and measles virus antibodies.
- Viral removal/inactivation validation studies for immune globulins using polio virus as a model virus.
- Aseptic Techniques in viral operations and manual filling of standards & controls
- GMP/GLP regulations by doing validations and writing SOPs, protocols & reports

8/90 to 11/90 **Guest Worker**, Laboratory of Developmental and Molecular Immunity, National

4/91 to 8/91 Institute of Child Health and Human Development, NIH, Bethesda, MD

- Purification of lipopolysaccharide (LPS) & preparation of conjugate vaccine.
- Serologic analysis of human sera for antibodies to LPS by ELISA

1989-1991 **Technical Officer**, Immunogenetics Lab, National Institute of Immunology, New Delhi, India

- Development of monoclonal antibodies to blood groups A and B
- Development of Immunoassays – Precipitation reactions, ELISA
- Maintenance & storage of cell lines (continuous cell lines, B and T-cell lines)

1977-1989 **Technical Supervisor and Assistant Technical Officer**, Polio Vaccine Testing Laboratory and Quality Control, Central Research Institute, Kasauli, (H.P.) India

- Quality control of bulk and final polio vaccine as per WHO Regulations
- Regulatory work and review of production and testing protocols
- Preparation of monovalent and trivalent polio virus preparations and monospecific sera for quality control of oral polio vaccine
- Clinical Serological methods, Immunochemical and Functional assays – Development and Correlation between Immunochemical and Functional assays
- Development of assays for quality control of polio vaccine
- Development of allogenic hybridomas and monoclonal antibodies to polio viruses and Japanese encephalitis virus
- Standardization and Quality Control of Vaccines and antisera for human use as per Pharmacopeial and WHO Regulations, including sterility test

Publications

1. **Gupta, C.K.** Comparative studies on antisera against polio viruses raised indifferent animals. M.Sc. dissertation, Himachal Pradesh University, Shimla, 1981.
2. **Gupta, C.K.**, Mahajan, B., Gupta, R.K., Rao, G.L.N.P. and Singh, H. Antibody response of guinea pigs to polio viruses. *Indian J. Pathol. Microbiol.* 1983;26:127-132.
3. **Gupta, C.K.**, Gupta, R.K., Sharma, B., and Singh, H. A rapid method for raising monospecific antisera against polio viruses in monkeys. *J. Com. Dis.* 1985;17:243-245.
4. Sokhey, J., **Gupta, C.K.**, Sharma, B. and Singh, H. Production and standardization of polio antisera in different animals. *Proceedings of National Seminar on Quality Control of Vaccines*, Central Research Institute, Kasauli, 1985:27-32.
5. Singh, H., **Gupta, C.K.**, Sharma, B. and Sokhey, J. Stability study of oral polio vaccine. *Proceedings of National Seminar on Quality Control of Vaccines*, Central Research Institute, Kasauli, 1985:40-45.
6. Sokhey, J., Sharma, B., **Gupta, C.K.** and Singh, H. pH studies on oral polio vaccine. *Proceedings of National Seminar on Quality Control of Vaccines*, Central Research Institute, Kasauli, 1985:46-51.
7. Singh, H., **Gupta, C.K.**, Sharma, B., Rao, G.L.N.P. and Sokhey, J. Sero-immunity of normal Rhesus monkeys to polio viruses. *Indian Vet. Med. J.* 1986;10:37-38.
8. Sharma, B., **Gupta, C.K.**, Rao, G.L.N.P., Maheshwari, S.C., Gupta, R.,K. and Singh, H. Sero-immunity to poliomyelitis in Himachal Pradesh. *Indian J. Pathol. Microbiol.* 1986;29:101-107.
9. Sokhey, J., **Gupta, C.K.**, Sharma, B., and Singh, H. Stability of oral polio vaccine at different temperatures. *Vaccine* 1988; 6: 12-13.
10. **Gupta, C.K.** Standardization of the procedure for production of monoclonal antibodies against polio viruses. M.Phil. dissertation, Himachal Pradesh University, Shimla, 1990.
11. Sokhey, J., **Gupta, C.K.**, Sharma, B. and Gupta, R.K. Statistical analysis of virus titres obtained in repeated assays of working standard of trivalent oral polio vaccine. *Vaccine* 1991;9:69-70.
12. Gupta, R.K., Misra, C.N., **Gupta, C.K.** and Saxena, S.N. Growth of allogenic hybridoma cells in non-histocompatible mice with the help of Ehrlich-Lette ascite tumor cells. *Biologicals* 1991;19:243-245.
13. **Gupta, C.K.**, Sokhey, J., Gupta, R.K. and Singh, H. Development of allogenic hybridomas for production of monoclonal antibodies against oral polio vaccine strains. *Vaccine* 1991;9:853-854.
14. Sokhey, J., **Gupta, C.K.**, Sharma, B. and Gupta, R.K. Statistical evaluation of virus titres of working standard of oral polio vaccine. *Vaccine* 1992;10:423.
15. Gupta, R.K., Relyveld, E.H., Lindblad, E.K., Bizzini, B., Ben-Efraim, S., **Gupta, C.K.** Adjuvants - a balance between toxicity and adjuvanticity. *Vaccine* 1993;11:293-306.
16. Leszczynski, J., **Gupta, C.K.** and Siber, G.R. The use of intravenous gamma globulin for CMV prophylaxis. *Transplantation* 1993,56,765.
17. Gupta, R.K., Higham, S., **Gupta, C.K.**, Rost, B. and Siber, G.R. Suitability of the Vero cell method for titration of diphtheria antitoxin in the United States potency test for diphtheria toxoid. *Biologicals* 1994;22:65-72.
18. **Gupta, C.K.**, Leszczynski, J., Gupta, R.K. and Siber, G.R. An enzyme immunoassay based micro-neutralization test for titration of antibodies to human cytomegalovirus (CMV) and its correlation with direct ELISA measuring CMV antibodies. *Biologicals*

- 1996;24:41-49.
19. **Gupta, C.K.**, Leszczynski, J., Gupta, R.K. and Siber, G.R. IgG subclass antibodies to human cytomegalovirus (CMV) in normal human plasma samples and immune globulins and their neutralizing activities. *Biologicals* 1996;24:117-124.
 20. **Gupta, C.K.**, Leszczynski, J., Gupta, R.K. and Siber, G.R. Stabilization of respiratory syncytial virus (RSV) against thermal inactivation and freeze-thaw cycles for development and control of RSV vaccines and immune globulin. *Vaccine* 1996;14:1417-1420.
 21. Randolph, V., **Gupta, C.**, Kane, A., Lopez, V. and Shutyak, L. Phenotypic correlates of mutations engineering into recombinant RSV vaccine strains. Discovery Research Meeting 1999 Poster, Lake George, NY.
 22. Kane, A., Chen, W., **Gupta, C.**, Shutyak, L. and Randolph, V. Genetic stability studies of recombinant derivatives of the cpts-248/404 live attenuated RSV vaccine strain. Discovery Research Meeting 2000 Poster, Lake George, NY.