

CURRICULUM VITAE

EDUCATIONAL QUALIFICATIONS:

**Project Associate at CDFD(Centre for DNA Finger printing and Diagnostics, Hyderabad)
from August 2005 onwards till update.**

Ph.D. Osmania University 2005 Human Genetics

M.Sc. Osmania University 1997 zoology, genetics & Fish Biology.

B.Sc. Osmania University 1994 Applied Nutrition, Chemistry, Zoology.

WORK EXPERIENCE:

2 years of teaching.

5 years of Research.

2 Projects

3 years in project with Inter University Consortium, Department of Atomic Energy Facilities,
Kolkata.

Hospital Survey from Clinical Records of Myopathies with Institute of Genetics & Hospital for
Genetic Diseases, Hyderabad.

Computerskills: MSDos, WINDOWS, MSOFFICE.

Ph.D. : Genetic and Cytogenetic Investigations in Breast cancer patients.

TECHNICAL EXPERIENCE:

CYTOGENETICS IN INVIVO OF HUMANS AND MICE.

CYTOGENETICS IN INVITRO OF HUMAN CULTURES

HUMAN LYMPHOCYTE CULTURES.

CHROMOSOMAL ABERRATIONS IN SOMATIC CELLS OF MICE.

CHROMOSOMAL ABERRATIONS IN GERM CELLS OF MICE.

ASSESSMENT OF MUTAGENICITY BY MICRONEUCLEUS TEST.

SPERM MORPHOLOGY ASSAY IN MICE.

CHROMOSOMAL ABERRATIONS IN HUMAN PERIPHERAL LYMPHOCYTE CULTURES.

SISTER CHROMATID EXCHANGES IN HUMAN PERIPHERAL LYMPHOCYTE CULTURES.

SINGLE GEL ELECTROPHORESIS ASSAY (COMET ASSAY).

BIOCHEMICAL TESTS :

GLUCOSE 6 PHOSPHATASE.
LIPID PEROXIDATION.
GLUTATHIONE S TRANSFERASE.
HAEMOGLOBIN ESTIMATION BY CYTOMETRY.
URIC ACID LEVELS IN BLOOD.
TRIGLYCERIDES INBLOOD.
BLOOD PROTEIN LEVELS.

PIXE (Particle Induced X-ray Emission).

COLLABORATORS:

IUC DAEF (Inter University Consortium for Department of Atomic Energy Facilities KOLKATA).
INSTITUTE OF PHYSICS BHUBANESHWAR.
INSTITUTE OF GENETICS AND HOSPITAL FOR GENETIC DISEASES HYDERABAD.
MEHDI NAWAZ JUNG INSTITUTE OF ONCOLOGY AND REGIONAL CANCER CENTRE
HYDERABAD.

PERSONNEL DETAILS:

NAME : SHOBA RANI.MEDAK.
NATIONALITY : Indian
DATE AND PLACE OF BIRTH : 7th September 1971,
Ranga Reddy District.
ADDRESS : 1-8-22/2/7,
Shashikanth Nagar, Kamalanagar, ECIL, Hyderabad -
500062. A.P (INDIA).
Ph.No 040-27133422
Cell No: 9849899429
EmailID medak@sify.com
PASSPORT NUMBER : 7162002(Valid till 2013)
LANGUAGES KNOWN : English, Hindi, Telugu.

PROJECTS:

- 1) Heavy Metal genotoxicity and Evaluation of Antimutagenic Diets. IUC-DAEF, Kolkata
- 2) Hospital Survey from Clinical Records of Myopathies. Institute of Genetics & Hospital for Genetic Diseases, Hyderabad.

SEMINARS: National Seminar on Stress and Homeostasis. UGC-DRS

CONFERENCES:

- 1) Protective Effects of Ascorbic Acid and Phyllanthus emblica Against Chromium Genotoxicity in Somatic Cells of mice at ISHG 2001 XXVI Annual Conference of the Indian Society of Human Genetics, Human Genome and Beyond.
- 2) Mutagenic Evaluation of chromium in Somatic and Germ cells of mice. Symposium on recent trends in life science And biotechnology during 20 to 22nd Nov. 2001.
- 3) Induction of chromosomal aberrations in peripheral lymphocytes by Chromium National Symposium on Bioresources, Biotechnology and Bioenterprise 19th – 21st November 2003.
- 4) Induction of chromosomal Aberrations in bone marrow cells of mice by 5Fluorouracil National Symposium on Bioresources, Biotechnology and Bioenterprise 19th – 21st November 2003.
- 5) Assessment of chromosomal aberrations in peripheral lymphocytes of Breast cancer patients. Current Concepts & Research in Infertility, Obs & Gyn. 31st January 2004.
- 6) Induction of chromosomal aberrations in germ cells of mice by 5Fluorouracil in Swiss albino male mice. Current Concepts & Research in Infertility, Obs & Gyn. 31st January 2004.

TRAININGPROGRAMMES:

1) **Attended summer school** training in Applied Human Genetics. At Institute of Genetics & Hospital for Genetic Diseases, Hyderabad.

2) **Training programme at IUC DAEF, Kolkata on**

2) Radiation and photochemistry perspectives & Applications.

3) Radiation Induced Cellular Damage.

4) Interplay of Single Particle and Collective Motion.

5) Ion Beam in Materials Studies.

PUBLICATIONS:

1) Assessment of Genotoxicity in Peripheral lymphocytes of Breast Cancer patients, under Chemotherapy. Journal of Environmental Biology (In Press).

2) Induction of chromosomal aberrations in Germ cells of mice by 5 Fluorouracil in Swiss Albino male mice. Indian Journal of Environment and Toxicology (In Press).

3) Induction of chromosomal aberrations in bone marrow cells of mice by 5 Fluorouracil. Trends in Life Sciences (In Press).

4) Induction of Chromosomal aberrations in Peripheral lymphocytes by chromium Trends in Life Sciences (In Press).

5) Chromium Induced Sister Chromatid Exchanges in Human Lymphocytes. Indian Journal of Environment and Toxicology : Volume 12 (1) 9-10, June 2002.

6) Protective effects of Ascorbic Acid against 5 Fluorouracil mutagenicity in bone marrow cells of Swiss albino mice (In Press).

7) Induction of chromosomal aberrations by 5Fluorouracil and modulatory effects by Ascorbic Acid in germ cells of mice (In Press).

RESEACH FIELD:

My Ph.D programme is entitled "Genetic and Cytogenetic investigations in breast cancer". From Human Genetics Lab, Osmania University. The work has been carried out in Invivo mammalian test system. Male swiss albino Mice and breast cancer patients were used for the purpose.

THE PROTOCOLS INCLUDE:

INVIVO STUDIES ON SWISS ALBINO MICE:

1. Analysis of chromosomal aberration in somatic cells of male Swiss albino mice with 5FU.
2. Analysis of chromosomal aberrations in germ cells of male Swiss albino mice with 5FU.
3. Sperm head abnormalities in mice with 5FU.

INVIVO HUMAN PERIPHERAL LYMPHOCYTES

4. Analysis of chromosomal aberrations in peripheral lymphocytes of breast cancer patients.
5. Analysis of sister chromatid exchanges in breast cancer patients.

Ph.D RESEARCH WORK:

The Ph.D thesis entitled "Genetic and cytogenetic investigations in breast cancer".

The effect of the antineoplastic drug, 5 – fluorouracil in the invivo and invitro mammalian test systems was studied .

The chromosomal aberrations and sister chromatid exchanges in the breast cancer patients with various age groups, stages of malignancy were studied. In the mice system the genetic effect of the drug 5Fluorouracil was studied using mitotic and meiotic chromosomal aberrations and sperm head abnormalities. The over all results showed that 5FU is mutagenic in mice system and is capable of any undue exposure or over doses of the antineoplastic drug, 5 fluorouracil could result in genetic damage.

The results showed significant clastogenic effects with the antineoplastic drug, 5fluorouracil. The metaphases screened showed structural chromosomal aberrations like gaps, breaks, iso-chromatid

exchanges, fragments and numerical damages like polyploidy. Significant co- relations were observed with that of the control population.

The modulation of the drug 5Fluorouracil with the VitaminC of synthetic and Natural from Phyllanthus Fruit Extract in the invivo Swiss albino mice in Somatic cells, germ cells and Sperm Head Abnormalities have resulted in Modulation in the cells. The results after various periods of modulation with different doses of the VitaminC are significant.

List of Referees:

1) Prof.K.Rudrama Devi,

Dept. of Zoology,
Osmania University College of Science,
Hyderabad-500 007.

Email rkanapuram@yahoo.co.in

Ph No (Off): 040 27682218

Cell No 9347224209

Res No 040 27424209

2) Prof.P.P.Reddy,

Director and Head,
Institute of Genetics and Hospital for Genetic diseases,
Ameerpet, Osmania University,
Hyderabad.

Ph No 040 23403681

Email redypp@rediffmail.com

3) Prof. RAGAVENDER RAO

Head, Dept. of Zoology,
Osmania University College of Science,
Hyderabad-500 007.

Ph No (Off): 040 27682218