

National Institute of Immunohaematology

(Formerly Institute of Immunohaematology)

I.Mandate:

- (1) Research in Haematology and Transfusion Medicine with view to take the fruits of Research from Bench to bedside in short possible time.**
- (2) Training and Development of Medical, Technical and Scientific manpower in Haematology & Transfusion medicine in the Country.**
- (3) Basic Research in Understanding in hematological disorders which are important cause of Mortality and morbidity In the country.**



II. Areas of Research Activity :-

- i. Transfusion Medicine.**
- ii. Haemoglobinopathies.**
- iii. Red cell Enzyme and Membrane disorders.**
- iv. Development of Monoclonal Antibodies.**
- v. Haemostasis and Thrombosis.**
- vi. Cytogenetic and Molecular Genetics in Leukemias and Myelodisplastic syndrome.**
- vii. Stem cell biology.**
- viii. Molecular biology in understanding Hematological disorders.**
- ix. Haematological complications in viral infection.**

III. Original contributions of the Institute.

- i. Discovery of Bombay phenotype & In^a blood groups.**
- ii. Several variants of G 6 P.D.**
- iii. 16 novel mutations of Red cell P.K. deficiency.**
- iv. Haemoglobin Agri, Haemoglobin Ratnagiri & Fibrinogen –Mumbai.**
- v. Extensive application of various prenatal diagnostic techniques for prenatal diagnosis of Haemoglobinopathies and congenital bleeding disorders.**
- vi. Few original contribution of unique cases in dysmorphology.**
- vii. Demonstration of anti inhibitory activity of EACA against factor VIII inhibitors.**
- viii. Development of costeffective techniques for invitro expansion of Haemopoietic stem cell.**
- ix. Development of tight association of HLA – B27 with chronic synovitis in haemophilia.**
- x. Demonstration of Dengue Virus infection and apoptics in megalocaryocytic precursor.**

Patent application Filed.

- 1. CRDB for Prenatal diagnosis of Thalassemia.**
- 2. Monoclonal antibody against Hb F**
- 3. Mismatch PCR technique to detect a common factor IX mutation in Haemophilia B**

Possible areas of collaboration:

- i. Transfusion Medicine : Looking for biological functions of various Red cell antigens.**
- ii. Stem cell Research : Biology and peculiarities of Leukemic stem cell.**
- iii. Haemostasis: Site directed mutagene for Coagulation factors and their activity relationship.**
- iv. Cytogenetics cell: Fanconi Anaemia Mutation in India biology Fanconi's Anemia as model for neoplastic development.**
- v. Haemoglobinopathies: Invitro studies on Hb F gene activating modulations.**

Ten recent important publications:

1. Exvivo expansion of umbilical cord stem cells using different combinations of cytokine and stromal cells,
Acta Haematol 20087 : 118 : 153 – 159. [I. F. 1:8.](#)
2. Contribution of Natural anticoagulant and fibrinolytic factors in modulating the clinical severity of haemophilia patients
Br. Jr. Haematol 2007 ; 138 : 541 – 544. [I.F. 4.08](#)
3. Chronic synovitis and HLA – B27 in patient with severe haemophilia.
Lancet. 2003;361:933-34. I. F. 22.00. [I. F. 22.0](#)
4. Immunogenetic association in patients with antinutrophil cytoplasmic antibodies (ANCA) from Mumbai, Maharashtra, India.
J. Autoimmunity 2005;24:227-33. [I. F. 2.154](#)
5. HLA – B27 polymorphism in Western India.
Tissue antigens 2002, 60 : 98-101. [I.F. 3.33](#)
6. Two distinct G-6PD variants G-6PD Jamnagar and G-6PD Rohini Caused by same 949 – A mutation.
Blood cells and Mol dis . 2005. 35;193 – 99. [I.F. 2.5](#)

Continued.

7. Correlation of thromboelastographic pattern with clinical presentation and rationale for use of antifibrinolytics in severe haemophilia patients. Haemophilia – 2007 in press. [I.F. 3.07](#)
8. Mutations in GPIIIa molecule as cause for Glanzmann's thrombasthemia in Indian patients. J.T.H. 2005;3:482-8. [I.F. 5.262.](#)
9. Impact of beta globin gene mutation on the clinical phenotype of β – thalassaemia in India. Blood cell and Mole.Dis. 2004; 33: 153 –7. [I.F. 2.5](#)
10. First Trimester prenatal diagnosis in haemophilia A and B families – 10 year experience from centre in India. Prenatal Diag. 2006;26:1015 – 7. [I. F. 1.5](#)



Thank You