



## JOHN C. MARTIN CENTER FOR LIVER RESEARCH AND INNOVATIONS

(A Unit of Liver Foundation, West Bengal) Registration No : S/IL/31676 of 2005-06

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### Citation summary for Dr. Anil K Mandal

Dr. Anil Kumar Mandal has made significant contributions to ophthalmology, both in clinical and in basic research. He has devised a new surgical technique – Illuminated Microcatheter Passage Assisted Circumferential Trabeculotomy-Trabeculectomy (IMPACTT) for advanced neo-natal onset congenital glaucoma. He has earlier popularized the surgical technique of Combined Trabeculotomy-Trabeculectomy that gives the best hope of success in congenital glaucoma in Indian patient population.

In basic research, Dr. Mandal's work has contributed to deeper insights into the molecular basis of congenital glaucoma. The dissection of the genetic and physical interactions of genes along with comprehensive genotype-phenotype correlations have helped identify novel functional targets in primary congenital glaucoma through various *in vitro* and *in vivo* approaches with an outcome aimed at devising novel molecular diagnostics for predictive testing and guiding therapeutics.

Dr. Mandal's approach in terms of holistic care (involving medical, surgical, genetic and rehabilitation approach) of children with congenital glaucoma has resulted in avoiding needless blindness for a life-time in these children. Some of them are now adults who have been able to compete with their typically developing peers during their childhood and adolescence. They reported enjoying a good quality of life and life satisfaction. Eleven of his treated children are now MBBS doctors (of these 8 completed postgraduation), 13 doctors are practicing dentistry, 7 completed PhD, and several other children are pursuing professions like chartered accountancy, bank managers, business, journalism, engineering, teaching, lawyer, agricultural sciences, and computer professionals, etc.

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