

Editor Dr Prajnya Ranganath

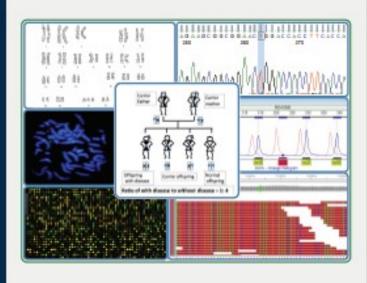
Associate Editors Dr Dhanya Lakshmi N Dr Shagun Aggarwal

Foreword & Guidance Dr Shubha R Phadke

Genetics Update for the Next *Gene*ration Clinician

(A Compilation of Articles from Genetic Clinics)





Published by The Society for Indian Academy of Medical Genetics (SIAMG)

NOTE: The soft copy will be available on request by email to shubharaophadke@gmail.com

'Paralearning' through the Landscape of Medical Genetics

I am glad to introduce this bouquet of articles on different aspects of medical genetics to the audience of medical doctors and basic scientists interested in the latest developments of medical genetics to the audience of medical doctors and basic scientists interested in the latest developments in genomic medicine.

The tremendous developments in deciphering the genome and identifying phenotypic effects of genomic variations have brought genetics to the clinic. The diagnosis and management of genetic disorders namely monogenic disorders and chromosomal disorders have got a big impetus due to genomic techniques like next generation sequencing and microarray. The same techniques have

revolutionized research and patient care of cancers, multifactorial disorders and infectious disorders leading to a paradigm shift in medical practice.

We are glad that these exciting developments in technology and the scientific and clinical expertise to use it are now available in India. The medical practitioners therefore have to update themselves to this new platform of clinically applicable knowledge. The pace of developments is too fast to keep oneself updated even for medical geneticists. 'Genetic Clinics', a three-monthly publication, has been a continued and regular effort of the Society for Indian Academy of Medical Genetics (SIAMG) to disseminate knowledge of the latest developments in medical genetics to interested doctors, students and scientists. The articles on clinically relevant aspects of diagnosis and management of genetic disorders as well as scientific marvels are presented in an easy-to-read fashion. We have selected some articles relevant to the present time from the previously published issues of Genetic Clinics and have compiled them in the form of a book. This compilation of articles will give an overview of clinical genetics and genomic diagnosis to make one interested and excited about the field. Most of the articles chosen are on clinical aspects and will make one comfortable in approaching patients and families with genetic disorders. The articles on use of latest technology for diagnostics are meant to clarify the principles of the tests and hence provide the clinician the power to order the appropriate test in each situation, and interpret the results with a good understanding of the limitations. Pre-test and post-test counseling are extremely important in the pre and post-natal evaluation of genetic disorders. Addition of practical genetic counseling scenarios, practical questions, photo quiz and crosswords has been done to improve understanding and add fun to the learning process.

I am sure the book will provide a good overview of genomic medicine and give clinicians an opportunity to update themselves on clinically relevant genetics-related topics. The objective is to enthuse the medical fraternity in India about genetics, so that they continue to learn with 'Genetic Clinics' in the future. I feel that reading of the book can be compared with paragliding over the beautiful landscape of genomic medicine and I am sure everyone will enjoy this 'paralearning' experience!

Dr Shubha Phadke M D [Pediatrics], D M [Medical Genetics] Professor & Head, Department of Medical Genetics Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India, 226014