



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George's Medical University, Lucknow, UP

19-21 November 2018

Convenor: Professor ML Bhatt, Vice Chancellor, KGMU, Lucknow, UP

Co-Convenor: Professor Dhavendra Kumar, Institute of Medical Genetics, Cardiff University, UK

Co-Convenor: Dr. Neetu Singh, Associate Professor, KGMU, Lucknow, UP

Unique training workshop aims to introduce fundamental aspects of genomic and molecular medicine to wide ranging Medical Faculty, Postgraduates in Medicine and Surgery and other Specialist Medical Practitioners.

Three day Workshop offers training in the key aspects of current practice in the following areas-

- Fundamentals of genetic and genomic medicine
- Concept of molecular basis of human disease
- Spectrum and heterogeneity of human disease
- Techniques for genetic, genomic and molecular pathology of human disease
- Scope and limitations of next generation genome sequencing in clinical medicine
- Specific issues in genome and molecular level diagnosis
- Gene and genome based molecular therapy for human disease
- Genomic and Molecular approach to infectious diseases
- Community and public health aspects of genomic & molecular medicine
- Targeted molecular therapy including Pharmacogenetics/Pharmacogenomics
- Gene & Genome based Therapeutics
- Practice of Intergrated precision genomic and molecular medicine

Training Faculty includes highly acclaimed clinicians and scientists from UK and other leading Indian Institutions

Apply now and secure a place in this unique and rare opportunity to enhance your current specialist clinical practice with up to date knowledge and insights from leading research in human genomics and molecular biology

For Registration

Please visit www.kgmu.org

For further information please contact

Professor Dhavendra Kumar (kumard1@cf.ac.uk)

OR

For registration information please contact

Dr. Neetu Singh (neetusingh@kgmcindia.edu / +91-9984801444)



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George’s Medical University, Lucknow, UP

19-21 November 2018

Aim

Introduce fundamental aspects of genomic and molecular medicine to Postgraduates in Medicine and Surgery and Specialist Medical Practitioners

Objectives

- Fundamentals of genetic and genomic medicine
- Concept of molecular basis of human disease
- Spectrum and heterogeneity of human disease
- Techniques for genetic, genomic and molecular pathology of human disease
- Scope and limitations of next generation genome sequencing in clinical medicine
- Specific issues in genome and molecular level diagnosis
- Gene and genome based molecular therapy for human disease
- Genomic and Molecular approach to infectious diseases
- Community and public health aspects of genomic & molecular medicine
- Targeted molecular therapy including Pharmacogenetics/Pharmacogenomics
- Gene & Genome based Therapeutics
- Practice of Intergrated precision genomic and molecular medicine

Targeted Audience

Postgraduates in Medicine and Surgery including Paediatrics, Pathology and Preventive Medicine
 Secondary and Tertiary level Medical Practitioners
 Academic and Researchers in Bio-Medical Sciences

Format

Selected Faculty Lectures; Interactive case discussions; Illustrative discussions; Practical demonstrations
 Quiz & Single best answer questions

Syllabus

1. Introduction Genomic & Molecular Medicine	Genetic, genomic and molecular basis of human disease- nucleic acids, genome architecture, inheritance patterns, genetic heterogeneity, genetic imprinting and epigenetics
2. Genetic/Genomic diseases I	Mendelian Genetics- Neuro-developmental disorders, Cardiovascular diseases and Inherited Cancer
3. Genetic Genomic diseases II	Disorders of genome architecture- Constitutional Pre/Post-natal Disorders; Microdeletion/Microduplication syndromes and Copy number variations
4. Genetic Genomic diseases III	Complex genetics/genomics- multi-factorial/polygenic causation; heritability, genome wide association study, single nucleotide polymorphisms, somatic versus germ line mutations/variants; paradigms of cancer & diabetes mellitus



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George's Medical University, Lucknow, UP

19-21 November 2018

5. Laboratory Genetics & Genomics	Introduction to conventional genetic laboratory methods and next generation genome sequencing- Karyotype analysis and FISH ; Array comparative genomic hybridisation (aCGH): Principle and applications in clinical genomics/ molecular; Gold Standard-Sanger Sequencing- principle, methodology, analysis; Whole exome and whole genome sequencing- scope and limitations- biomedical research and clinical practice; Interpretation of genomic variants for clinical use- guidelines and International consensus; Overview of Third Generation Sequencing Technologies and Application
6. Therapeutic applications	Gene & Genome Therapeutics I RNA interference; antisense oligonucleotides, gene therapy and gene/genome editing
7. Genetics/ Genomics in Clinical Practice	Personalised and Precision Medicine including Pharmacogenetics & Pharmacogenomics and Targeted Molecular therapy
8. Infectious Diseases	Microbial/ Pathogenomics, Genome-based diagnosis and screening for communicable diseases, anti-microbial resistance, HIV, endemic/pandemic viral infections, anti-viral therapy and genome vaccines and parasitic diseases- malaria/ filaria etc.
9. Public and Community Health	Population genomics, community genetic diseases (Thalassemia/ Sickle cell); genetic screening; prevention, forensic applications and disaster management
10. Clinical Genomic and Molecular Medicine	Integrated genomic and molecular medicine- organization; multi-disciplinary team, consent & confidentiality, database, quality/ outcome measures and ethical, legal, social issues (ELSI)
11. Clinical Genetics and Medicine	Genetic rare diseases Rare diseases genes part of common diseases Contributions of rare diseases in modern clinical medicine

Practical sessions:

1. Laboratory Demonstrations-

Demonstration of Real Time-PCR & Microarray-aCGH based Identification and analysis of variations
Demonstration of Sanger Sequencing & Third generation sequencing

2. Clinical Genomics/ Molecular Medicine

Family history interpretation and Pedigree drawing
Genetic risks assessment and calculation
Interpretation of Karyotype/ FISH
Interpretation of Array CGH & genetic and genomic laboratory reports
Genetic counselling & Discussion of key ethical issues



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George’s Medical University, Lucknow, UP

19-21 November 2018

Organizers:

Professor M.L.B. Bhatt, KGMU, India: Convenor
Professor Dhavendra Kumar, Cardiff, UK: Co-Convenor
Dr. Neetu Singh, KGMU, Lucknow, India: Co-Convenor

Chief Guest:

Prof. Devendra Kumar Gupta, AIIMS New Delhi

Advisory Committee:

Professor Amita Jain, CFAR, KGMU, Lucknow, India
Professor Alok Dhawan, Director, CSIR-IITR, Lucknow, India
Professor Madan Madhav Godbole, SGPGI, Lucknow, India
Professor Tapankumar N. Dhole, SGPGI, Lucknow, India
Professor Sonia Nityanand, SGPGI, Lucknow, India
Professor Nuzhat Husain, RMLIMS, Lucknow, India
Dr. Anil Kumar Balapure, CSIR-CDRI, Lucknow, India
Dr. Srikanta Kumar Rath, CSIR-CDRI, Lucknow, India
Dr. Devendra Parmar, CSIR-IITR, Lucknow, India
Professor Abbas Ali Mahdi, Vice Chancellor, Era Medical University, Lucknow, India
Professor Amita Pandey, KGMU, Lucknow, India
Professor V. S. Narayan, KGMU, Lucknow, India
Professor A. K. Tripathi, KGMU, Lucknow, India
Professor R. K. Garg, KGMU, Lucknow, India
Professor Anoop K. Verma, KGMU, Lucknow, India
Professor Hardeep Singh Malhotra, KGMU, Lucknow, India
Professor Madhu Mati Goel, KGMU, Lucknow, India
Professor Monisha Banerjee, Lucknow University, Lucknow, India

International Faculty: Speakers

Prof. William Newman, Center for Genomic Medicine, University of Manchester, UK
Prof. Patrica Munroe, Professor of Molecular Medicine, Queen Mary University of London, UK
Prof. Indu Singh, Department of Haematology, Griffiths University, Goldcoast, Australia
Dr. Chris Yoo, Systems Imagination, USA

National Faculty: Speakers

Professor Narinder Mehra, AIIMS/ICMR, New Delhi, India
Professor Ratna Puri, SGRH, New Delhi, India
Professor Meena Bhatt, CGH, Bangalore, India
Professor Reena Das, PGI, Chandigarh, India
Dr. Vinod Scaria, IGIB-CSIR, New Delhi, India
Professor Sunit Kumar Singh, BHU, India
Dr. Akhtar Ali, BHU, India
Professor Ashutosh Halder, AIIMS, New Delhi
Dr. C.V. Ramprasad, Senior Scientist/Director, Medgenome, Bangalore

Local Faculty: Speakers

Professor Shubha Phadke, SGPGI, Lucknow, India
Dr. Swasti Tiwari, SGPGI, Lucknow, India



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George’s Medical University, Lucknow, UP

19-21 November 2018

Local Faculty:

Professor Shailendra Saxena, CFAR, KGMU, Lucknow, India

Dr. Ashutosh Shrivastava, CFAR, KGMU, Lucknow, India

Dr. Satyendra K Singh, CFAR, KGMU, Lucknow, India

Dr. Nitu Nigam, CFAR, KGMU, Lucknow, India

Dr. Dinesh Kumar Sahu, CFAR, KGMU, Lucknow, India

Dr. Ratnesh Kumar Tripathi, CFAR, KGMU, Lucknow, India

Dr. Shivani Dixit, CFAR, KGMU, Lucknow, India

Dr. Hari Shyam, CFAR, KGMU, Lucknow, India

Dr. Pratap Pathak, CFAR, KGMU, Lucknow, India

Dr. Abhishek Mishra, CFAR, KGMU, Lucknow, India

Ms. Archana Mishra, CFAR, KGMU, Lucknow, India

Mr. Md. Nawazish Alam, CFAR, KGMU, Lucknow, India



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George's Medical University, Lucknow, UP

19-21 November 2018

REGISTRATION FORM

Part 1: Registration Information (please write in block capitals)

Title _____ Last Name _____ Middle Name _____ First Name _____

Affiliation _____

Address _____

City _____ State _____ Country _____

Zip/Postal Code _____ Telephone _____

Fax _____ Email _____

Part 2: Registration Payment

Till October 30, 2018 (With Accommodation):

	Registration Fee	18% GST	Total
Student Applicant (MS, MDS, MSc., Ph.D.)	Rs. 20,000	Rs. 3,600	Rs. 23,600
Regular Academic (Faculty position in Govt/Private Institutions)	Rs. 25,000	Rs. 4,500	Rs. 29,500
Business/Industry	Rs. 30,000	Rs. 5,400	Rs. 35,400

Till October 30, 2018 (without Accommodation):

	Registration Fee	18% GST	Total
Student Applicant (MS, MDS, MSc., Ph.D.)	Rs. 10,000	Rs. 1,800	Rs. 11,800
Regular Academic (Faculty position in Govt/Private Institutions)	Rs. 15,000	Rs. 2,400	Rs. 17,400
Business/Industry	Rs. 20,000	Rs. 3,600	Rs. 23,600



“Current Trends in Genomic and Molecular Medicine”

First Indo-UK Training Workshop

SERB-DST Sponsored Workshop

Molecular Biology Unit, Center for Advance Research

King George's Medical University, Lucknow, UP

19-21 November 2018

REGISTRATION FORM

Registration Fee Paid

Amount (Rs.) _____ GST Charges (18%) (Rs.) _____ Total (Rs.) _____

Method of Payment (Kindly tick the appropriate box)

Payment (by one of the methods listed below) must accompany the registration form. **Please note your registration will not be processed until payment has been received in full.**

- A Cheque (payable to **Center for Advance Research**; enclose registration details)
- B Bank draft (payable at Lucknow in favour of **Center for Advance Research**; enclose registration details)
- C Bank transfer (Account Number: 50438883622; IFSC Code; ALLA0211028; enclose registration details)
- D Credit card (Account Number: 50438883622; IFSC Code; ALLA0211028; enclose registration details)

Payment details

A: Cheque no: _____ Date _____

Name of the Bank _____

B: Draft no: _____ Date _____

Name of the Bank _____

C: Date of Transfer: _____ Reference No _____

Name of the Bank _____

D: Type of Credit Card _____ Date _____

Credit Card No _____ Exp Date _____

Date:

Signature:

Name:

(Please send the form along with the payment to Molecular Biology Unit, Center for Advance Research, King George's Medical University, Uttar Pradesh, 226 003, INDIA. You can also email the details at neetusingh@kgmcindia.edu (In any case of difficulty, please contact Co Convenor at +91-9984801444)