Dr. Anand Srivastava, M.S., Ph.D.

Dr. Anand Srivastava has been associated with leading universities and research institutions of USA. In affiliation with University of California San Diego Medical College (UCSD), University of California Irvine Medical College (UCI), Salk Research Institute, San Diego; Burnham Institute For Medical Research, San Diego; University of California Los Angeles Medical College (UCLA), USA has developed several research projects and has an extensive research experience in the field of Stem cells which is documented by several publications in revered scientific journals.

Dr. Anand Srivastava's success has its root in his unique background of expertise in Stem cell biology, protein biochemistry, molecular biology, immunology, in utero transplantation of stem cell, tissue targeting, gene therapy and clinical research. His expertise also extends to genetic engineering research, developmental biology, immunology, making transgenic animals and searching and characterising new genes. He has been bestowed upon USA Congressional Recognition for his contribution in the field of Stem Cell Science.

Dr. Srivastava is the Chairman and Cofounder of California based Global Institute of Stem Cell Therapy and Research (GIOSTAR) headquartered in San Diego, California, (U.S.A.). The company was formed with the vision to provide stem cell based therapy to aid those suffering from degenerative or genetic diseases around the world such as Parkinson's, Alzheimer's, Autism, Diabetes, Heart Disease, Stroke, Spinal Cord Injuries, Paralysis, Blood Related Diseases, Cancer and Burns.

Dr. Radhakrishna G Pillai

Dr. Pillai did his PhD in Biochemistry at the University of Kerala before joining the University of Calicut in 1994. During his PhD, Radhakrishna purified and characterized a novel sulfotransferase enzyme involved in the conversion of ascorbic acid to ascorbic acid 2 sulphate. After a post-doctoral fellowship in University of California, San Diego he moved to Imperial College London in 2001 as a recipient of an Action Research Award during which he studied the possibility of using viral protein in the suppression of immune rejection of transplanted organs. Later he was awarded a Cancer Research UK fellowship for investigating the pharmacokinetics of cancer drugs using Positron Emission Tomography (PET). In 2013, Radhakrishna moved back to the University of Calicut, establishing his own group, and is remaining there ever since. Radhakrishna’s research is now focusing on the stimulation of stem cells in the body using Ayurvedic preparations in an attempt to develop therapeutic strategies for various degenerative diseases.

Global Initiative on Academic Network (GIAN)
“Techniques and Processes in Biological and Therapeutic Research (TPBTR-19)”
15th to 25th July 2019 at University of Calicut,

Registration Form

Name (Dr/Mr/Mrs/Miss) : ........................................
Father’s Name : ........................................
Date of Birth (DD/ MM/ YY) : ........................................
Gender (Male/Female) : ........................................
Nationality : ........................................
Present position : ........................................
Contact Information : ........................................
Contact Number (Mobile) : ........................................
Email : ........................................

Accommodation required: Yes/No
I agree to follow the rules and regulations of the course and the course fee will be paid immediately on offer of admission.

Signature of Head of the Department/Institution ........................................
Signature of the Participant ........................................

Please send the completed form to the course coordinator
Techniques and Processes in Biological and Therapeutic Research (TPBTR-19)

Concepts drawn from various disciplines such as biological, chemical, physical, technological, computational and engineering sciences led to development of advanced biomedical knowledge and tools for research, diagnosis and therapy for human diseases. This has improved the effectiveness and delivery of therapies and had increased accessibility and had markedly decreased the cost of life saving therapies. These had also improved the quality of life, yet further advancing is needed to resolve many of the daunting issues before the scientists.

Mastering the fast developing new technologies with hands on experience is important to be successful in research and diagnosis in bio-medical sciences. This course will provide an opportunity to learn some of the most advanced techniques directly from a world renowned expert which will also make the trainees confident in applying the techniques.

The course will give emphasis on a research-orientated approach, and the program comprises both theoretical and practical elements where trainees will get an opportunity to develop skills in the different techniques taught. The course embraces cutting-edge developments in the fields of molecular biology, gene therapy including in-utero gene transfer, stem cell technology (including stem cell mediated therapy) etc. The lectures and tutorials during the two weeks are planned in a way to make use of the knowledge and skills of the experts. This will ensure that the all practical issues and concerns with these techniques will be addressed during the course and ensure effective training.

Course Schedule

Dates of the program: 15th to 25th July 2019 (10 days)

Schedule

Day 1:
Lecture 1: Stem cells in therapy and research
Lecture 2: Advances in biomedical sciences
Tutorial 1: Stem cell isolation, need analysis

Day 2:
Lecture 3: Industrial and therapeutic application of stem cells
Tutorial 2: Stem cells in blood cancer therapy, Apheresis
Tutorial 3: Achievements, analysis, progress plan, Scaffolding

Day 3:
Lecture 4: Gene therapy – In utero gene transfer
Lecture 5: Biological imaging to aid gene transfer, stem cell based therapy and in utero manipulations
Tutorial 4: Isolation and culture of stem cells from various niches in the body
Tutorial 5: Isolation of Bone marrow stem cells

Day 4:
Lecture 6: Organ and cell transplantation
Lecture 7: Stem cells in health and disease
Human pluripotent stem cells in culture

Day 5:
Lecture 9: Graft versus host disease – host immune suppression and manipulation, Immune silencing of grafts
Lecture 10: Organ and tissue transplantation – stem cell mediated tissue development
Lecture 11: Radio immunoassay and Enzyme immuno assay
Tutorial 7: Demonstration of techniques
   Imaging- microscopy (Light microscopy, fluorescent imaging, Electron Microscopy)

Day 6:
Lecture 12: Biomedical techniques in evaluation of drugs
Lecture 13: Use of nanoparticle for targeted drug delivery
Tutorial 8: Formulation of drug impregnated nanoparticles
   Demonstration of Immuno assays

Day 7:
Lecture 14: Cancer immunotherapy
Lecture 15: Bioprocess technology - practical approach
Tutorial 9: Demonstration of cancer immunotherapy
Tutorial 10: Demonstration of Bioprocess technology

Day 8:
Lecture 16: Cancer immunotherapy – future prospects
Tutorial 11: Phage display

Lecture 17: Non invasive scanning of soft tissue
Tutorial 12: Problem solving sessions with examples, PET

Day 9:
Lecture 18: Cancer therapy using stem cells
Tutorial 13: Stem cell mediated therapy in degenerative diseases
Lecture 19: Maintenance and manipulation of stem cells, directed differentiation of stem cells

Day 10:
Lecture 20: Subcellular localization of proteins
Tutorial 14: Project planning using the skills acquired
Tutorial 15: Developments ideas into project

Examination: Result of the examination will be intimated to the participants within two weeks of completion of the course.

Who can attend?

- Graduate and PG students, PDFs from biological, Pharmaceutical and medical sciences. Limited seats can be offered to undergraduate students.
- Faculty members from University departments, institutes and colleges
- Researchers from national research laboratories, pharmaceutical industry professionals.

Course Fee (Paid only after admission offer)
Participants from abroad: US $200, SAARC countries: US $75
Industry/Research Organizations: Rs. 6000-
Participants from academic Institutions: Rs. 4000-

The participants will be provided accommodation in guesthouse on payment and availability basis.

Registration at GIAN website is mandatory

Course Coordinator
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GIAN One-Time Registration:
http://www.gian.ietkpp.ac.in/GREGN/