

CHITKARA
UNIVERSITY



SCHOOL OF
HEALTH SCIENCES

12th International ADT Conference

Theme

Innovation and Integration: The Latest Trends in Diagnostics

15th & 16th March, 2024



About the Conference

Chitkara School of Health Sciences, Chitkara University has been organizing the Advanced Diagnostic Techniques (ADT) Conference every year, since its inception in 2012. This Conference encourages young and innovative minds pursuing careers in science and technology by providing a suitable platform to present their research work and enhance their scientific acumen through interactions with eminent scientists and field experts. This year again, we proudly invite applications for the 12 th edition of the International ADT Conference.

ADT-2024

The theme of the 12 th International ADT Conference is “Innovation and Integration: The Latest Trends in Diagnostics”, which aims to bring together leading academic scientists, researchers, scholars and students to exchange and share their experiences and research results on various aspects of Advances and Innovations in Diagnostics. The conference aims to bring together both national and international researchers, health practitioners, educators, and students to deliver papers and spark debates about recent trends and breakthroughs in the field of diagnostics, and will include a variety of presentations, discussions and keynote addresses. It will include a variety of presentations on current research projects, as well as engaging discussions and keynote addresses. We envision that this conference will give an excellent chance for researchers from various domains of Health Sciences to exchange ideas and find useful collaborations in this endeavour of ours.

About CSHS

Established in 2011, Chitkara School of Health Sciences is exclusively dedicated to the education of health care professionals. We envision training and developing health care professionals who can create a difference in the quality of life of all those who require healthcare. Our course curriculum is a blend of theory, practical and clinical exposure. Our esteemed faculty and our strong collaborations with industry leaders are the pillars of our successful journey through these 11 years. The training with the industry helps to develop high degree of conceptual skills, analytical skills and quality technical knowledge base and prepare our students for hospitals and related healthcare domains. We offer more than 14 UG/PG programmes in different domains including Allied Healthcare, Optometry, Physiotherapy, Nutrition Dietetics and Nursing. We also offer doctoral programmes in several domains of Health Sciences.

Focus Areas

12th International ADT Conference will be focusing on 4 different tracks from the following scientific areas for Oral/Poster Presentations:

Track 1: Innovations in Lab Diagnostics;

Track 2: Advances in Medical Imaging

Track 3: AI and Digital Health Diagnostics;

Track 4: Integrative Approaches in Disease Diagnosis

Call for Abstracts

Original and unpublished research/review papers are invited for the 12 th International ADT Conference. Papers would be selected for poster presentation or oral presentation based on reviewer committee decision.

Students, Research Scholars, Researchers, Faculty members, Doctors, Health Care Professionals, Industry Professionals are invited to submit abstracts of their original and unpublished research/review papers for the 12th International ADT Conference from the following thrust areas:

Track 1.

Innovations in Lab Diagnostics:

- o Biomarkers And Signalling Pathway
- o Precision And Personalized Medicine
- o Diagnostics In Infectious Diseases
- o Diagnostics In Optometry
- o Nano Technology, Bioinformatics and Molecular Biology
- o Immunodiagnostics and Transplant Immunology
- o Digital Pathology
- o In-Vitro Diagnostics

Track 2.

Advances in Medical Imaging

- o Image Guided Intervention Radiologic Procedures
- o Imaging Modalities in Neuroradiology
- o Challenges In Paediatric Imaging
- o Emerging Technology in Mammography Imaging
- o Radiation Protection Measures in Radiology Imaging
- o Imaging In Oncology
- o Fusion Imaging

Track 3.

AI and Digital Health Diagnostics

- o E-Health and Mobile Health Diagnostics
- o Wearable Technologies for Health Monitoring
- o Healthcare Applications (Apps)
- o Telemedicine
- o Biosensor Technology
- o Digital Pathology
- o XR, IOT, AR And VR in Healthcare
- o Automation in Laboratory
- o Machine Learning and Deep Learning in Disease Diagnosis

Track 4.

Integrative Approaches in Disease Diagnosis

- o Integrating Multiple Diagnostic Modalities
- o Cross-Disciplinary Research Models
- o Clinical Decision Support Solutions
- o Ayush Initiatives and Phytomedicine
- o Interdisciplinary Approaches in Diagnostics
- o Molecular Imaging
- o Nutrigenomics and Nutraceuticals
- o Biotechnology and Genetics
- o Infection Control in Post-operative Procedures
- o Infertility Diagnosis and Interventions



Link For Registration

Send the abstract with payment ID details to
radt@chitkara.edu.in

Only the abstracts submitted as per the guideline available on website
(<https://chitkara.edu.in/radts/>) will be selected for presentation/publication

Selected full length papers will be published in Scopus Indexed
Journal/Conference Proceedings

APC will Apply

Important Dates

- Deadline for abstract 20th February, 2024
- Notification of acceptance of abstract 28th February, 2024
- Release of Conference program 4th March, 2024
- Last/Due date of registration 4th March, 2024

Fee Details

	Due Date	After Due Date
• Professionals from Industry	Rs. 2000/-	Rs. 3000/-
• Delegates from Academia/Faculty Members/Scientists	Rs. 1500/-	Rs. 2000/-
• Research Scholars with Fellowships	Rs. 1000/-	Rs. 1500/-
• Students (UG/PG) Rs. 700/-	Rs. 1000/-	

Speakers



Dr. Rajat Sandhir
Professor
Department of Biochemistry
Panjab University, Chandigarh



Dr. Ashok Rattan
Chairman Medical Committee and Quality
Redcliffe Labs, Delhi



Dr. Anita Sharma
Consultant, Lab Medicine
Fortis Hospital, Mohali



Dr. Uma Kanga
Additional Professor
AIIMS Hospital, New Delhi



Dr. Deepander Singh Rathore
Assistant Professor,
Homi Bhabha Cancer Institute And
Research Centre, New Chandigarh.



Dr. Kamaljeet Singh Randhawa
MD, DNB
Consultant radiologist
Fortis Hospital, Mohali

Speakers



Dr. Sandeep K. Vashist
Senior Global IVD Product Director
Fapon Biotech Inc. Germany



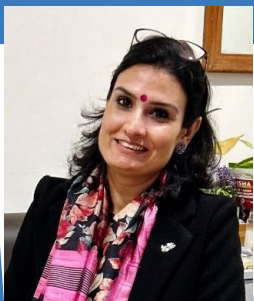
Dr. Nitin Kumar Singhal
Scientist E,
National Agri Biotechnology Institute,
Mohali



Dr. Kris See
Medical Director, Chief Clinical
and Innovative Scientist
Osel Group. Federal Territory of Kuala Lumpur,
Malaysia Neuropharmacology



Dr. Shikha Gupta
Director - IVF & Gyne Endoscopy
Neelam Hospital, Punjab



Dr. Shweta Prabhakar
Head Quality & Patient safety
Fortis Hospital, Mohali



Dr. Anish Bhattacharya
Professor, Nuclear Medicine
PGIMER Chandigarh

Speakers



Santosh Kumar
Sr. Nuclear Medicine Technologist
University College London Hospital (UK)



Dr. Vishavdeep Goyal
Zonal Director Fortis Hospitals
Ludhiana & Amritsar

Pre-conference Workshops

IADT-2024 endeavours to provide holistic learning experience to its participants through interactive engaging expert sessions, scientific paper presentations, competitive activities and hands on workshops for the students, researchers and budding professionals. IADT 2024 presents a series of preconference workshops catering to various specialisations, led by eminent industry experts. Different hands-on workshops are being organized related to the theme of 12th ADT conference on 14th March 2024 at Chitkara University in Offline mode. All those who are interested in participating are requested to contact the organisers or send email at radt@chitkara.edu.in, mentioning their area of interest along with registration ID for further details by 10th March 2024.

- **Workshop I: Hands on workshop on “Augmenting nutritional disease diagnosis using machine learning and design thinking”**

Resource Persons

Dr. Poonam Khanna
Additional Professor of Nutrition,
School of Public Health, PGIMER,
Chandigarh.

Dr Rachana Srivastava
Scientist,
School of Public Health,
PGIMER, Chandigarh.

Savitesh Kushwaha
Research Associate,
School of Public Health,
PGIMER, Chandigarh.

Introduction: The complexity of the different disease mechanisms and underlying symptoms of the patient population presents massive challenges in developing the early diagnosis tool and effective treatment. Machine learning (ML), an area of artificial intelligence (AI), enables researchers, physicians, and patients to solve some of these issues. The approaches in machine-learning-based disease diagnosis (MLBDD) are slowly gaining popularity. It includes the use of algorithm, disease types, data type, application, and evaluation metrics.

Objectives:

The workshop would focus on:

- a. Precision nutrition and current trends of AI in nutrition.
- b. Planning precision nutrition in Diabetes
- c. Nutritional Diagnosis using ML: Development and Deployment of Models

Outcomes: ML learns from the data using various algorithms and is a self-improving process in terms of performance as adjusting during the learning process. ML has been successfully applied to practically every domain such as robotics, education, travel to health care. In the healthcare domain, the ML approaches are mainly used for the purpose of disease diagnosis.

Target Audience: Professionals from industry, faculty members, clinicians, research scholars, and UG/PG students from the field of nutrition and dietetics, public health, nursing and machine learning.

- **Workshop II:** Hands on workshop on “**Innovations in diagnostics using machine learning in radiology and imaging technology**”

Resource Persons

(Prof) Dr. Vinay Kukreja

Director (Research),
Chitkara University Research
and Innovation Network (CURIN),
Chitkara University, Punjab.

Co-resource Person:

Dr. Yogesh Kumar

Research Scientist
Department of Radiation Oncology
University of Alabama at Birmingham, USA

Introduction: Radiology, centres on the utilisation of imaging modalities to diagnose and treat diseases. It extends beyond mere disease detection, to encompass treatment guidance and ongoing disease management. Expertise in diagnostic modalities such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Positron Emission Tomography (PET), Ultrasound and X-rays guide immediate clinical interventions, treatment monitoring, and chronicle a visual narrative of a patient’s health. From the discovery of X-rays to the subsequent integration of artificial intelligence (AI) and machine learning (ML), radiology is continually evolving.

Objectives: This workshop will be targeting audience from radiology background and will provide insights into Machine learning in radiology modalities. This hands-on workshop

- a. Aims to exemplify from the analysis of observations or data to identify patterns and make informed future decisions based on these observations.
- b. Provide the basics of machine learning for predicting or classifying data from pre-established outputs of different modalities.

Outcomes: The future of radiology is guided by the integration of AI and ML. AI algorithms process and interpret data, performing tasks that emulate or even surpass human cognitive capabilities. ML, through exposure to labelled examples, is capable of extracting complex, high-level data, even from unlabelled datasets.

Target Audience: Professionals from industry, faculty members, clinicians, research scholars, and UG/PG students from the field of radiology and imaging technology and AI.

- **Workshop III: Hands on workshop on “Applications of real-time PCR for Research and Development in Clinical laboratory Diagnostics”**

Resource Persons

S Shirish Kumar

Manager
Sales Applications,
QIAGEN India Pvt. Ltd.

Facilitator:

Anurag Kanwal

Accounts manager
(Chandigarh) QIAGEN India Pvt. Ltd.

Introduction: The polymerase chain reaction (PCR) has become one of the most important tools in molecular diagnostics, providing exquisite sensitivity and specificity for detection of nucleic acid targets. Real-time monitoring of PCR has simplified and accelerated PCR laboratory procedures and has increased information obtained from specimens including routine quantification and differentiation of amplification products. Clinical diagnostic applications and uses of real-time PCR are growing exponentially and real-time PCR is rapidly replacing traditional PCR.

Objectives:

The Hands on workshop would include:

- a. Isolation of DNA from blood and tissue
- b. Step by step protocol for real time PCR (hands on)
- c. Interpretation of CT value
- d. Importance of real time PCR in Disease diagnosis

Outcomes: Real-time PCR is rapidly becoming the “gold standard” of nucleic acid sequence detection and quantification. The strengths of this technology are manifold: ease and speed of assay execution for large batches of samples; highest sensitivity (single targets can be detected in a 10¹²-fold excess of unrelated nucleic acids); wide dynamic range (at least six orders of magnitude) of detection and quantification with a linear relation between log target to detection threshold cycle; highest specificity approaching 100% in well-designed assays with hybridization probes; and differentiation of detected nucleic acid sequences. These advantages ensure that real-time PCR will continue to replace ever more diagnostic assays in the clinical laboratory.

Target Audience:

Professionals from industry, faculty members, clinicians, research scholars and UG/PG students from the field of medical laboratory sciences, life sciences, infection control etc.

Organizing Team

PATRON



Dr. Ashok K Chitkara
Chancellor
Chitkara University



Dr. Madhu Chitkara
Pro Chancellor
Chitkara University

CO-PATRON



Dr. Archana Mantri
Vice Chancellor
Chitkara University, Punjab

Organizing Chairperson



Dr. Sonika Bakshi
Dean,
Chitkara School of Health Sciences,
Chitkara University, Punjab

Organizing Secretary



Dr. Navita Gupta
Associate Professor,
Chitkara School of Health Sciences, Chitkara
University, Punjab



Dr. Abhilasha Sood
Assistant Professor,
Chitkara School of Health Sciences, Chitkara
University, Punjab

For more details :

Visit our website



<https://chitkara.edu.in/radts/>

Organizers:

Allied Health Sciences Department,
Chitkara School of Health Sciences, Chitkara
University, Punjab 140401.

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Sponsors:

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(DST Funded Chitkara University Technology Enabling Centre)

For any queries call:

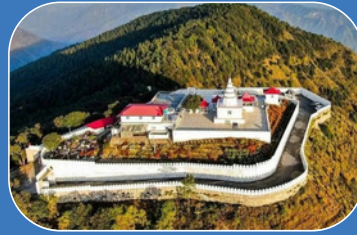
Dr. Abhilasha Sood, +91-9988851015,
Dr. Navita Gupta, 9888495006



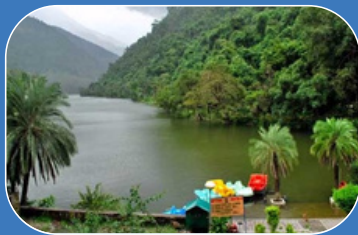
Nearby Places To Visit



Morni Hills, Panchkula



Chail



Renuka lake



Yadavindra Gardens
Pinjore



Bird Park
Chandigarh



Mohinder Chaudhary
zoological park
Chhatbir Zoo, Punjab



Shimla



Timber Trail



Rock
Garden
Chandigarh



Sukhna
Lake
Chandigarh



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