

**25TH-27TH  
NOV'2022**

## INTERNATIONAL CONFERENCE ON GLOBAL HEALTH CHALLENGES & INNOVATION (GHCI' 2022)



### About Ranchi

Ranchi, capital of Jharkhand also known as City of Waterfalls is the home to not only many waterfall but it is known for its scenic beauty and temples and unexplored beauty. Few of the famous of waterfalls and locations of Ranchi includes Panch Gagh Falls, Dasham Falls, Hundru Falls, Jonha Falls, Hirni Falls, Sita Falls, Jagannath Temple, Ranchi Lake, Rock Garden, Kanke Dam, Sun Temple, Tagore Hill, Pahari Mandir, State Museum Hotwar, Nakshatra Van, Patratu Valley, Birsa Zoological Park, etc.

### About the Institute

Indian Institute of Information Technology (IIIT) Ranchi is an Institute of National Importance under the act of Parliament of India established in 2016. IIIT Ranchi is part of Government of India initiative to setup 20 new Indian Institutes of Information Technology (IIITs) on a Public Private Partnership Model, established in 2016. The major objective was to set up a model of education which can produce best-in-class human resources in IT and harnessing the multidimensional facets of information technology in various domains. IIIT Ranchi is committed to academic excellence and good governance.

The Institute is currently offering B. Tech (Hons.) degree in Computer Science and Engineering (CSE) and Electronics and Communication Engineering (ECE) as well as B.Tech CSE with specialization in Data Science and Artificial Intelligence and B.Tech ECE with specialization in Embedded Systems and IoT. The institute also offers M. Tech in Data Science and Artificial Intelligence and M. Tech in Embedded Systems and IoT as well as Ph. D programs.

### About the Conference

Global health is collaborative cross-national research and action to promote health for all. Health is an important issue with many challenges in investigation, diagnosis, treatment, monitoring, drug of choice, and side effects. Mental health issues negatively impacts millions of people's life globally. Modern technologies like the Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL), among others, could help solve problems in the healthcare field and mental health issues.

GHCI'2022 aims to bring together researchers, leading scientists, psychiatrist, psychologist, doctors, mathematicians, and healthcare workers to share knowledge, present their novel ideas, and discuss the challenges and present novel solutions in the field of healthcare. This conference also strives to provide an opportunity for young researchers, academicians, and practitioners with multidisciplinary interests to meet and interact with members across a range of disciplines.

### Patron

Prof. Vishnu Priye, Director, IIIT Ranchi

### Convenor

Dr. R K Pradhan, Associate Professor, IIT Kharagpur

### Co-Convenor

Dr. Jayadeep Pati, Assistant Professor, IIIT Ranchi

### Secretary

Dr. Shalini Mahato, IIIT Ranchi

Dr. Bam Bahadur Sinha, IIIT Ranchi

### Program Committee

Dr. R K Pradhan, IIT Kharagpur  
Prof S K Sia, Central University of Pondicherry.

Prof. (Dr). Nishant Goyal, CIP, Ranchi

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Prof Rasmita Das Swain, NIEPA1.

Dr Abhay Kumar (Assistant Professor, ANMCH, Gaya)

Prof (Dr) V K Singh (Psychiatrist),

Dr Rajendra Kumar, RIMS

Dr. Jayadeep Pati, Assistant Professor, IIIT Ranchi

Dr. Shalini Mahato, Assistant Professor, IIIT Ranchi

Dr. Bam Bahadur Sinha, Assistant Professor, IIIT Ranchi

### Topic of Interest

GHCI'2022 aims to examine some recent developments in the interaction between emerging technologies addressing mental health issues and innovations. The conference will focus on finding relevant applications of different tools and techniques for diagnosing, and analysing the challenges of global health. Topics of interest for submission include, but are not limited to:

#### Medical Science

- Neuroscience
- Oncology
- Optogenetics

#### Expert Systems

- Machine learning for healthcare
- Diagnosis in medical imaging

- Psychology
- Psychiatry
- Neurology and Neurological Sciences
- Medical consultation
- Medicine recommendation using Chatbot

### Image Processing

- Biomedical signal and image processing
- Advanced medical image retrieval
- Advanced medical image reconstruction
- Medical Imaging Diagnosis
- Advanced molecular/pathologic image analysis
- Multimodal neurochemical and/or imaging biomarkers
- Gait and motion analysis using complex biomedical signals

- Deep learning for medical systems and applications
- Markov decision processes for clinical decision support
- Pattern recognition in biomedical applications
- Machine Learning in Bioinformatics
- Outbreak Prediction

### Big Data Analytics

- Big data in health care
- Clinical big data analytics
- Learning with non-stationary data
- Complex medical data and data analysis
- Crowdsourced medical data collection
- Smart Health Records

#### IMPORTANT DATES

**Abstract Submission Deadline:** 25<sup>th</sup> August'2022

**Full Paper Submission Deadline:** 16<sup>th</sup> September 2022

**Acceptance Notification:** 10<sup>th</sup> November'2022

#### PROCEEDINGS

All accepted and presented papers will be published in ELSEVIER (confirmation awaited)

#### ORGANIZED BY

Indian Institute of Information Technology Ranchi, Jharkhand, India  
in collaborations with  
National Association of Mental Health and Allied Health (NAMAHA), Foundation

#### VENUE:

Auditorium, IIIT Ranchi, Smart City  
JUPMI Building, 3rd Floor, Plant Plaza Road, Dhurwa, Ranchi, Jharkhand – 834004, India