

# 3<sup>rd</sup> International Conference on “Health GIS 2009”

Venue : Hyderabad International Convention Centre (HICC)  
HALL 5 and 6, HICC and Hotel Novotel Complex

## Programme Schedule

**JULY 25, 2009**

08:00 - 18:00 Hrs

**Registration**

09:00 - 10:45 Hrs

**Opening Ceremony**

**Dr. I.V. Murali Krishna,**  
Chairman, Organising Committee, HealthGIS 2009

**Dr. YS Rajasekhara Reddy,**  
Hon'ble Chief Minister of Andhra Pradesh, India

**Dr. V. Jayaraman,**  
Director, National Remote Sensing Centre, NRSC-ISRO, India

**Sri Danam Nagender,**  
Hon'ble Minister for Health and Family Welfare, Andhra Pradesh, India

**Sri Ghulam Nabi Azad,**  
Hon'ble Minister for Health and Family Welfare, Government of India

**Dr. Nitin K. Tripathi,**  
Organising Secretary, HealthGIS 2009, Director Academic, AIT Bangkok

10:45 – 11:30 Hrs

**Key Note:** Bill Davenhall, ESRI, USA

11:30 - 12:00 Hrs

**Inauguration of Exhibition / Poster session and Tea**

12:00 - 13:30 Hrs

**Key Note Session-1 (Hall 5)**

**Chairpersons:**

**Dr. Kaew Nualchawee,** Burapha University, Thailand ,and  
**Mr. L.V. Subrahmanyam,** IAS,  
Principal Secretary, Health, Medical and Family Welfare, Govt. of A.P.

**Key Note Presentation**

**Mr. L.V. Subrahmanyam,** IAS,  
Principal Secretary, Health, Medical and Family Welfare, Govt. of A.P.

**Professor Dr. Hyo Choi,** Kangnung-Wonju National University, Korea

**Professor Dr. Fazlay S. Faruque,** The University of Mississippi Medical Center, USA

**Professor Dr. G.P. Patil,** Pennsylvania State University, USA

13:30 - 14:30 Hrs

**LUNCH**

**JULY 25, 2009**

14:30 - 16:00 Hrs

**Key Note Session-2 (Hall 5)**

**Chairpersons:**

**Dr. Saied Pirasteh**, Associate Prof., Univ. Putra Malaysia and

**Dr. B.G. Sangameshwara**, Principal, SJ College of Engineering, Mysore

**Key Note Presentation**

**Dr. Mrs. A. Umanath**, EMRI- Emergency Management Research Institute, Andhra Pradesh, India

**Dr. R. Nagaraja**, Head, NDC, National Remote Sensing Centre, India

**Mr. Achyut Rao**, Director-SAARC, Digital Globe, India

14:30 – 16:00 Hrs

**Workshop : Digital Governance and Hotspot Geoinformatics -**  
[HICC Flexi Hall First floor 1.01]

**Prof. G.P. Patil**, Pennsylvania State University, USA

16:00 – 16:20 Hrs

**TEA**

16:20 - 17:50 Hrs

**Technical Session-1 : IT and Health** [ HICC Flexi Hall First floor 1.01 ]

**Technical Session-2 : Viral Diseases** [ HICC Flexi Hall First Floor 1.02]

**Technical Session-3 : Healthcare Planning and Management-1**  
[ HICC VIP lounge Second Floor ]

17:30 – 18:00 Hrs

**TEA AND POSTER SESSION**

18:00 - 19:30 HRS

**JALASRI DANCE BALLETT BY  
MS. JHELUM PARANGJPE, SMITALAY GROUP  
(SPONSORS: AGIT, PENNSYLVANIA UNIV.,  
ICRISAT, MRD, (HALL 5)**



**JULY 25, 2009**

**16-20 -17-50 Hrs**

**Details of Technical Sessions 1, 2 and 3**

**Technical Session 1: IT and Health** [HICC Flexi Hall First floor 1.01]

**Chairpersons:**

**Dr. Thomas Kraft**, Germanay

**Dr. Valli Manickam**, ASCI, India

Web based GIS for Visualizing and Analyzing epidemical data of Tumkur District hospital

*Prema Sudha, Swagat.S Patil and B.S.Adiga*

Integrated Spatio-Temporal Framework for Realization of an Mobile Health Management System

*Arindam Dasgupta, Indira Mukherjee and S K Ghosh*

Health Service Offering System Using GIS Based Smart Cards

*Ehsan Khayambashi, Hamidreza Rezaei and Hajar Namazi*

Mobile Data Management for Integrated Medical Care Services

*S.R.Balasundaram Sadhu and Saravanan Appu*

Mapping the Poor and Technology Enabled Micro Planning For Improved Health and Basic Services

*Yogesh Kale, Anuprit Minhas and Tamara Failor.*

Geospatial Kerala Health Information System (GKHIS)

*Suresh Francis and Bindu. P Ramankutty*

GIS: A Tool in Road Traffic Injury Research

*Mohan Venkata Raghav, Rajiv Sarkar, Vinod Joseph Abraham and Vinohar Balraj*

ICT for improving health care of rural communities of Bangladesh

*Lutfor Rahman*

**Technical Session 2: Viral Diseases** [ HICC Flexi Hall First Floor 1.02]

**Chairpersons:**

**Dr. Hyo Choi**, Korea

**Dr. V. Raghava Swamy**, NRSA, India

Application of a Remoteness Index: Funding Malaria Programs

*Carol Beaver, S Pontifex, Y Zhao and L Marston*

A study of HIV/AIDS related knowledge and attitudes among the engineering college students of Lucknow, India

*Arjit Kumar, P. Bhardwaj, P. Gupta, J.P. Srivastava & K.P. Mathur*

Socio-environmental Variability and Barmah Forest Virus Disease Transmission: A Review of Epidemiological Evidence

*Suchithra Naish and Shilu Tong*

**JULY 25, 2009**  
16-20 -17-50 Hrs

Exploring geospatial factors contributing of Dengue Fever (DF) and Dengue Haemorrhagic Fever (DHF) in Chachoengsao Province, Thailand

*Phaisarn Jeefoo, Nitin K. Tripathi, Marc Souris, Seishiro Kibe and Vivarad Phonekeo*

Spatial analysis of 5-year Typhoid incidence in Kelantan, Malaysia

*Shamsul Azhar Shah, Mohd Rohaizat Hassan, Shaharuddin Idrus and Abdul Hadi Harman Shah*

Geographical Information System: understanding the epidemiology of Japanese Encephalitis

*Amarjeet Singh and Dinesh Kumar*

The Knowledge and Attitude of students of the Azad University of Saveh about AIDS and Challenges In Iran

*Esmael Shariat and Ali Akbar Nazary*

**Technical Session 3: Healthcare Planning and Management-1**  
[ HICC VIP Lounge Second Floor ]

**Chairpersons:**

**Professor Dr. Fazlay S. Faruque**, USA

**Professor Usha Vyasulu Reddi**, ASCI, India

Unplanned Urbanization, Emerging Environmental Perils and the need for Information Technology to Mitigate Resulting Health Hazards Faced by the Urban Population: A Third World Perspective

*Ankur Das*

GIS based public health information system in Punjab (India)

*Rajesh Bansal, L.N. Sharma, Siby John and Kumar Sunil*

Integrating GIS in Health Care Planning: Government Initiatives in Orissa State of India

*G. Mathivathanan and Mithun Karmakar*

GIS based Environment Data Management System for Public Health

*Guggilla Chanti and Srikanth Tangedipalli*

Environment Assessment for Health Management through Spatial Technology - A case study from India

*M. Govindaraju, V.R. Muthukumaran, P. Visvanathan, R.S. Ganeshkumar and M. Sivasankari*

Adding Spatial and Temporal Dimensions to the Healthcare

*Srikrishna Pothukuchi*

Business intelligence in healthcare

*Jayakanth Dornadula and Sourabh Sarupria*

<b>JULY 26, 2009</b>	
08:00 - 13:30 Hrs	Registration [Contd]
09:00 - 10:30 Hrs	Technical Session-4 [Hall 5] <b>Emerging Diseases -1</b> Technical Session-5 [HICC Flexi Hall First floor 1.01] <b>HealthGIS Database</b> Workshop on <b>Gerontology</b> [HICC Flexi Hall First floor 1.02]
<b>10:30 - 10:50 Hrs</b>	<b>TEA AND POSTER SESSION</b>
10:50 - 12:15 Hrs	Technical Session-6 [Hall 5] <b>Telemedicine and Advance Health Instruments</b> Technical Session-7 [HICC Flexi Hall First floor 1.01] <b>Emerging Diseases -2</b> Workshop on <b>Gerontology</b> [HICC Flexi Hall First floor 1.02]
12:15 - 13:30 Hrs	Technical Session-8 [Hall 5] <b>Healthcare Planning and Management-2</b> Technical Session-9 [HICC Flexi Hall First floor 1.01] <b>Systems and Software</b> Workshop on <b>UNIGIS</b> [HICC Flexi Hall First floor 1.02]
<b>13:30 - 14:30 Hrs</b>	<b>LUNCH</b>
14:30 - 15:30 Hrs	Technical Session-10 [Hall 5] <b>Healthcare Planning and Management-3</b> Technical Session-11 [HICC Flexi Hall First floor 1.01] <b>Air, Water and Health</b>
15:30 - 16:15 Hrs	<b>Key Note Session 3</b> [Hall 5] <b>Chiarpersons:</b> <b>Dr. S. Sahnawaz</b> , Austria <b>Dr. V.S. Chary</b> , Director, ASCI, India  <b>Key Note Presentation</b> <b>Dr.-Ing. Phisan Santitamnont</b> , Member,NSDI, Thailand, Chulalongkorn University, Thailand <b>Dr. Ravi Gupta</b> , Editor, e- Health and e-Governance and Digital Learning <b>Dr. Thomas Krafft</b> , Director, Geomed Research Forschungsgesellschaft mbH, Germany <b>Dr. Kaew Nualchawee</b> , Advisor, Geinformatics Space Techn Development Agency, (GISTDA), Burapha Univ, Thailand
<b>16:15 - 16:30 Hrs</b>	<b>TEA</b>
16:30 - 17:30 Hrs	<b>Plenary, Awards and Closing Ceremony</b> [Hall 5] <b>Prof. Dr. I.V. Murali Krishna</b> , Chairman, Organising Committee, HealthGIS 2009 <b>Prof. Kaew Nualchawee</b> , Advisor, Geinformatics Space Tech Development Agency, (GISTDA), Burapha Univ, Thailand <b>Mr. Bill Davenhall</b> , Gobar Health Director, ESRI, USA <b>Professor Dr. Hyo Choi</b> , Kangnung-Wonju National University, Korea <b>Professor Dr. Fazlay S. Faruque</b> , The University of Mississippi Medical Center, USA <b>Dr. M. Chandrasekhar</b> , Director –R&C, Administrative Staff College of India, Hyderabad <b>Dr. D. Swaminathan</b> , Former member Planning Commission, Vice Chairman, AP State Planning Board, A.P., India <b>Sri P. Satyanarayana</b> , Hon’ble Minister of ArogyaSRI, Andhra Pradesh, India <b>Dr. Nitin Kumar Tripathi</b> , Organising Secretary, HealthGIS 2009

**JULY 26, 2009**  
09.00 - 1030 Hrs

#### Details of Technical Sessions

#### Technical Session 4: Emerging Diseases -1 HICC Flexi Hall [First floor 1.01] :

##### Chairpersons:

**Dr. Amarjit Singh**, India  
**Dr. N.C. Gautam**, India

Survey about congenital hypo thyroidism patients follow up and prevalence from 2005 to 2008 at Tehran University's region

*Azita Karimi, Farzaneh Cheveh, Fatemeh Haj Ali Asgari, Mohammad Reza Ghayoomzadeh, Hamid Khodabandehloo Soltani and Mohammad Ali Shokri*

How to integrate high spatial resolutions in Health Impact Assessment for traffic related air pollution in Flanders, Belgium?

*Stijn Dhondt and Luc Hens*

GIS application in a social gerontology study in Baguio City, Philippines

*Alicia G. Folloso, Ma. Cecilia San Luis and Ma. Ana B. Diaz*

The Relationship between Inversion and Tehran Air Pollutants by using Multiple Variation Regression Test (Synchronous Entrance Method)

*Saeid kamyabi and Mahnaz Parvazi*

Filariasis monitoring and visualization system

*P. Sampath Kumar, Murthy YVS, Srinivasa Rao M, Sri Ram K, Madhusudhan Rao K and Murthy USN*

Using GIS in Explaining Spatial Distribution of Brucellosis in an Endemic District in Iran

*Mirzazadeh A., AA Haghdoost, L Kawaguchi, H Rashidi, A Sarafinejad, AR Baniyasi and C Davies*

#### Technical Session 5: HealthGIS Database

[HICC Flexi Hall First Floor 1.02] : **Viral Diseases**

##### Chairpersons:

**Dr. Shamsul Azhar Shah**, Malaysia  
**Dr. Janaki Vellanki**, India

Critical Factors Influencing Electronic Health Records (EHR) Implementation: Important Lessons for Saudi Arabia Public Hospitals

*Fares Alshammari and Shane Thomas*

Survey about PKU patients follow up and prevalence from 2006 to 2008 at Tehran University's region

*Fazaneh Cheveh, Azita Karimi, Fatemeh Haji Ali Asgari, Mohammad Reza Ghayoomzadeh, Hamid Khodabandehloo Soltani and Mohammad Ali Shokri*

GIS - Health Infrastructure mapping for Andhra Pradesh state

*Rajiv Sharma, Dakshina Murthy Kakunuri and SathyaNarayana N.*

Open Source GIS based Framework for Development of Health SDI

*R.D. Gupta, Arun B Samaddar, RK Barik and Marguerite Madden*

Investigation of Tuberculosis Clusters in Dehradun City using Geographical Information System and Spatial Scan Statistic

*Neeraj Tiwari, K.Ram Mohan Rao, V. S. Tolia*

**July 26, 2009**

09.00 - 1030 Hrs

**Details of Technical Sessions**

Real Time Distributed Geographical Information System (DGIS) tool for recording, updating and analysing the health related data using Open Source Technologies

*Kapil Oberai and K. Ram Mohan Rao*

Health GIS for part of Trivallore town using Cartosat1 & Liss 4 Pan Merged data

*Dr S. Mohamed Ghouse, J. Rathika, V. Balamurugan and V. Ramakrishnan*

Building a Georeferenced Population Health Registry

*Chandrasekaran Angarai Ramaswamy, Seetharaman Narayanan, Vadiou Ganesan, Christopher Amalraj Vallabadas and Shanmuganathan Pasupathy*

10-50 - 12-15 Hrs

**Technical Session 6: Telemedicine and Advance Health Instruments**

[ HICC Hall 5 ]

**Chiarpersons:**

**Dr. S. Mohamed Ghouse**, India

**Dr. R.D. Gupta**, India

Diagnosing Arrhythmia of Patients by Detecting R-R intervals in ECG Signal

*Shilpa S Joshi and P.T.Karule*

Telemedicine and location based services for medical operations

*Madhav P. Ramachandran*

Twitter in Healthcare – A Boon or a Bubble?

*Sivaram Inguva and Jayakanth Dornadula*

Critical evaluation of Software based Videoconference Solution for Telemedicine

*Repu Daman Chand and S K Mishra*

Telemedicine secure data hybrid network intrusion detection model

*B. Naga Malleswara Rao, N.Sambasiva Rao and V. Khanaa*

Advanced laparoscopic training kit for surgeons and medical students with realistic audio & visual simulation

*Dinesh A. Kumar, M. Thamizhazhagan and M. Venkatesan*

**Technical Session 7: Emerging Diseases -2 [ HICC Flexi Hall First floor 1.01 ]**

**Chiarpersons:**

**M. Zahirul Haq**, Bangladesh

**Dr. Sandeep Bhalla**, India

Mapping of Cutaneous Leishmaniosis in Kerman City from 2002 to 2006 and its Environmental Risk Factors; by Geographical Information System

*Mirzazadeh A., Hajarizadeh B, Mesgarpour B, Golozar A and Holakouie Naieni K.*

Spatial Statistics Analysis of JE Occurrence and Identification of Disease Hot Spots - Case Studies in a JE Endemic District of North East India

*Bijoy K. Handique, Kasturi Chakraborty, Jonali Goswami and Kamini K. Sarma*

Mapping childhood obesity in Greece with the use of GIS technology

*Christos Chalkias, Kostas Tambalis, Glyceria Psarra, Demosthenes Panagiotakos and Labros Sidossis*

**July 26, 2009**  
12-15-13:30 Hrs

#### Details of Technical Sessions

GIS study on infectious diseases in cities along asian highway route 9 (Mukdahan-Savannakhet-Hue)

*Kosum Chansiri and Sutatip Chavanavesskul*

A Study of Morbidity Pattern And Mental Status of Geriatric Population in Lucknow's Urban Slums

*Arjit Kumar, P. Bhardwaj, P. Gupta, J.P. Srivastava and K.P. Mathur*

The impact of homelessness over physical and mental health of the street children in Dhaka

*Sonya Afrin, Kazi Murshida Morshed and Sarah Bashneen Suchana*

12:15 - 13:30 Hrs

#### Technical Session 8: Healthcare Planning and Management-2 [HICC Hall 5 ]

##### Chiarpersons:

**Dr. Fatemeh Haj Ali Asgari**, Iran

**Dr. M.V. Lakshmi Devi**, India

Spatial and Spatio-Temporal Clusters of Under-Five Mortality in Rural Bangladesh

*M. Zahirul Haq, Nurul Alam and Peter Kim Streatfield*

Spatial analysis of Reach Settlement and Expense Transportation to the Public Health Community in Depok, West Java, Indonesia

*Martya Rahmaniati*

Role of Socio-Cultural System in the Emergence of Diseases – a Case Study of Hyderabad

*M.V. Lakshmi Devi*

Modelling spatial risk for prime-age adult mortality in Viet Nam

*Deok Ryun Kim, Mohammad Ali, Vu Dinh Thiem, Camilo J Acosta, Lorenz von Seidlein, Michael Favorov and John D Clemens*

A Spatial Decision Support system to Blood Bank Services: A Case study to private blood bank in Tumkur

*Prema Sudha, Shivakumar swamy, B.S. Adiga and Smita M. Kolhar*

Providing the possibility of using GIS in management decision-making in the Health sector

*Mohammad Zare, Mrs. Parvin Shamszadeh and Abbas Najjari*

The analysis of accessibility levels and health and therapeutic service allocation with use of GIS (A case study Zanjan city hospitals)

*Mohsen Ahadnejad and Abdollah Heidari*

**JULY 26, 2009**  
12:15 - 13:30 Hrs

## Details of Technical Sessions

### Technical Session 9: Systems and Software [HICC Flexi Hall First floor 1.01 ]

#### Chairpersons:

**Dr. Siby John**, India

**Dr. Ramana Rao**, EMRI, India

The investigation of stress factors related to job finding in educated women & its relationship with their general health

*Katayoon Bavandpour and Seyed Mehdi Feiz Javadian*

Family Planning and Birth Regulation Applying Vital Horoscope Forms and GIS Software

*Nadereh Hasandolabi, Fatemeh Haji Ali Asgari and Mahdiye Khanmohammadi*

A GIS model for suitable settlement camp regarding disaster, a case study in Tehran Province (Iran)

*Hassan Samadyar, Ardavan Sasani and Robab Samadyar*

Open source Quantum GIS-based 'Gram Panchayat QGIS' for use by village workers in participatory panchayat development planning and implementation

*Nagesh Kolagani, C. Lakshmana Rao, Koshy Varghese, Aparna Krishnan, S. V. Ramanan, A. Ravindra and I.V. Muralikrishna*

Application of GIS in Health-Care Service Accessibility Inceasation

*Mahdieh Khanmohammadi, Fatemeh Haji Ali Asgari and Roya Naghavi*

Polyanalyst- Spatial Datamining Tool for Polio Cases Analysis

*K. Anuradha, P. Premchand, N. Sandhya and I. V. Murali Krishna*

July 26, 2009  
14:30 - 15:30 Hrs

## Details of Technical Sessions

### Technical Session 10: Healthcare Planning and Management-3 [Hall 5]

#### Chiarpersons:

**Dr. Kosum Chansiri**, Thailand

**Dr. Gita Reddy A**, Osmania University, India

From Mapping to Planning Maternal Services in India –with GIS

*M Bhattacharya, Subash amd Hema Gogia*

Demand pattern of Medical Emergency Services for Infectious Diseases in Andhra Pradesh- A Geo-spatial Temporal Analysis of Fever cases

*Biranchi Jena, MNV Prasad and Suresh Murthy*

Impact of Changing Land use Pattern on Mosquito borne Diseases - A case study of Raigad District, Maharashtra, India

*Sapana Ashok Sasane*

GIS Mapping of All Government Health Facility in India

*Ashok Kumar and Anoop Kumar*

Better health system Management with use of geographic software

*Mohammad Reza Ralmani Roodoshan,  
Fatemeh Haj Ali Asgari and Mohammad Ali Shokri*

### Technical Session 11: Air, Water and Health [HICC Flexi Hall First floor 1.01 ]

#### Chiarpersons:

**Dr. Chruba Raj Chimire**, Nepal

**Dr. Suresh**, EMRI, India

Management of mucus related respiratory problems through sinuses and airways cleaning exercises

*M. Prakash Rao*

Monitoring of Volatile Organic Compounds (VOCs) in Ambient Air at Maptaphut, Thailand

*Suwisa Mahasandana, Nitin Kumar Tripathi, Chansod Kitiyaporn,  
Thongiem Anusara and Chansoda Ukrit*