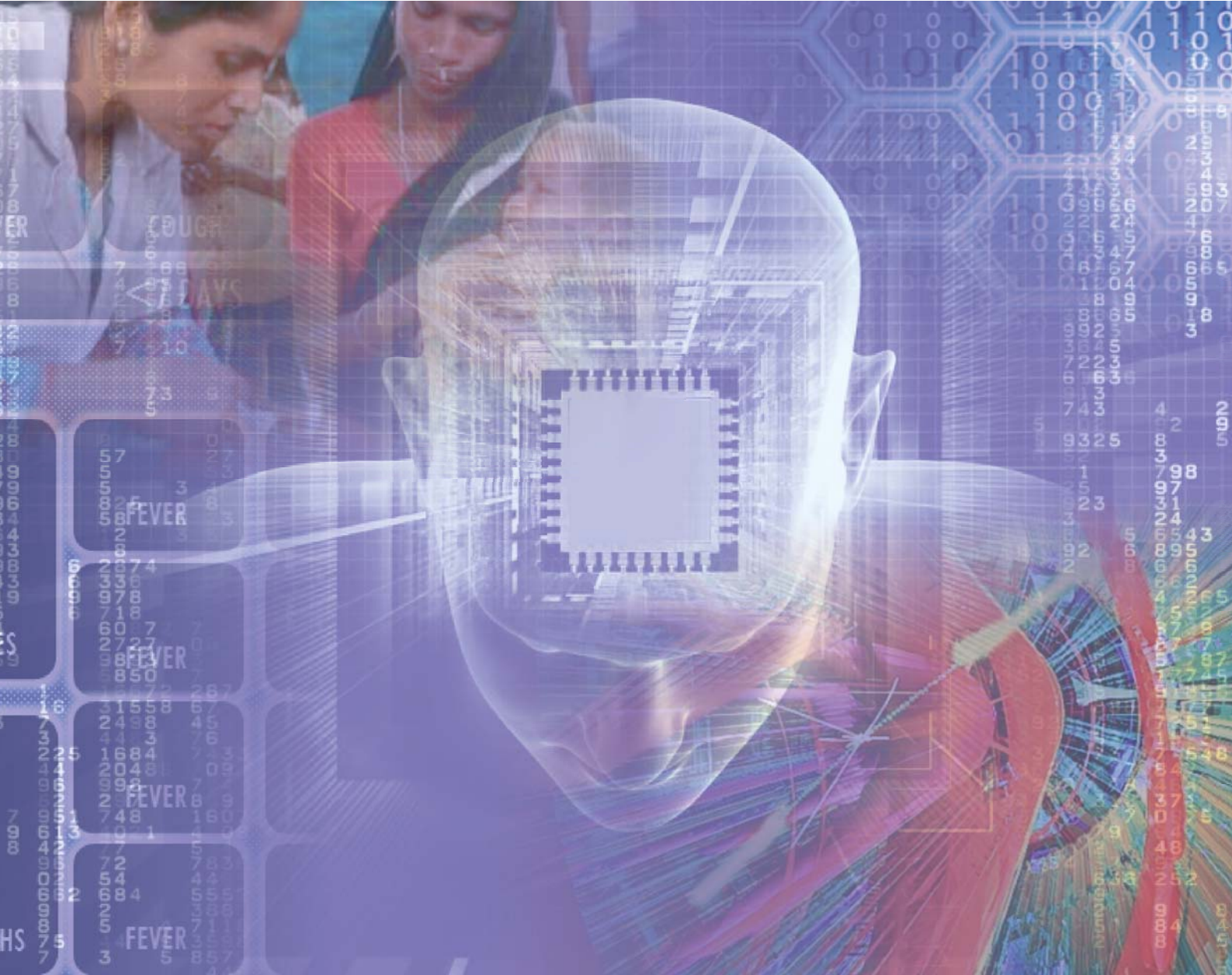# Integrated MSc & PhD
in Health Informatics

August 2013 session
Venue: Indian Institute of Public Health - Hyderabad

Integrated MSc & PhD in Health Informatics

BACKGROUND

Health Informatics has tremendous promise in improving the efficiency, cost-effectiveness, quality, and safety of health care service systems. However, realizing the promise has been a difficult path for health care organizations, as there is a paucity of adequately skilled Health Informatics professionals. General purpose information technology solutions are usually inadequate for specialized needs of the health sector. Health Informatics deals with four major interdisciplinary components; emerging technologies, epidemiology and health management, advanced statistics and health systems. The scope of health Informatics is very wide as there are a variety of emerging new technologies that need to be understood, adapted, and validated for use in health systems and then managed for continuous improvement. Integrated MSc & PhD in Health Informatics offered jointly by Public Health Foundation of India (PHFI) in collaboration with Academy of Scientific and Innovative Research (AcSIR) has the potential to bring the best in health care and technology based on research and innovations on one platform for students across India and South Asia.

DEGREE AWARDING AND REGISTERING BODY

The MSc & PhD (Health Informatics) programme will be jointly conducted by PHFI and AcSIR and the degrees will be by Academy of Scientific and Innovative Research (AcSIR). For more information visit http://acsir.res.in

PROGRAM STRUCTURE

Masters in Health Informatics

The MSc program in Health Informatics is an intensive 2 year, full time program focusing on applications of Informatics and Technologies in Public Health. A total of 4 semesters will be completed in 24 months with each semester spanning 6 months. The first three semesters include class room and lab based face to face teaching and the final semester includes 6 months of thesis cum internship. The student needs to complete 9 compulsory core courses (modules), 6 elective courses (modules) in 18 months and submit an internship completion certificate to be awarded the MSc degree.

PhD in Health Informatics

The students who complete the Master's program with a CGPA of 8 and above will be eligible for the PhD program. A formal application needs to be submitted which will be screened & enrolment will be finalized by the PhD screening committee. The PhD program is 3 year full time and project based. The research topic for PhD will be developed under the guidance of mentors from PHFI and AcSIR. The students are free to choose any topic of their interest ranging from basic sciences to community based studies. The student can be allocated to any of the CSIR laboratories in India depending on the thesis topic.

VENUE OF THE PROGRAM

The program will be conducted at

Indian Institute of Public Health – Hyderabad
Plot No. 1, A N V Arcade, Amar Co-operative Society,
Kavuri Hills, Madhapur, Hyderabad- 500033

PROGRAM ADMINISTRATION AND LANGUAGE

The program is being offered from the Indian Institute of Public Health – Hyderabad (IIPH-H), Public Health Foundation of India (www.phfi.org). The main language of instruction would be English.

PROGRAM CONTENTS

The multidisciplinary curriculum that will be covered under the core courses (modules) include: Public Health Concepts and Practices; Biostatistics; Principles of Epidemiology and Research Methodologies; Developing Health Informatics Systems: Software, Hardware, Networks and Sensors; Telemedicine; Project Management and Evaluation of Public Health Informatics Systems; Patients Monitoring Systems (PMS); Clinical Decision Support Systems (CDSS); Electronic Health Records (EHR) and Research writing - Proposal development, Protocol and Report writing.

Under the elective courses we offer various areas that will fall under the following streams: Public Health Management; Health Financing and Insurance; Principles of Environmental Health Sciences; Logistic Planning and Drug Distribution; Public Health Nutrition Urban Health; National Health Programs; Electronic Surveillance in Public Health; Data Mining and Data Forecasting in Public Health; Ethics in Health Informatics; Cyber Security for Health; Biometrics for Health Systems; GIS in Public Health; Wearable Diagnostics; Consumer Health Informatics (CHI); Electronic Medical Education (EME); Veterinary Health Informatics; Nursing Informatics; Bio Medical Gene Technology Informatics; and finally Open elective that can be uniquely designed.

Please visit (www.phfi.org) to know more about the course (module) information of this program.

TARGET AUDIENCE AND ENTRY REQUIREMENTS

This program is relevant to those wishing to gain an in depth understanding of applications of Informatics and Technologies in Public Health & also keen to specialize in a various areas of Health Informatics.

Minimum Academic Qualifications

Bachelor's degree, in any science discipline under the 10+2+3 system. Preference will be given to candidates with working experience in health care and information technology.

All applicants should have basic computing skills and proficiency in English.

SELECTION PROCESS

All candidates should submit the application form for the integrated MSc & PhD program in the prescribed format. The application consists of registration form, proof of academic credentials, work experience, contact details of 3 referees and statement of purpose. The applications will be short-listed based on their academic qualifications, relevant experience and statement of purpose. This will be followed by a face to face or telephonic interview. The selection of candidates will be executed by a specially constituted screening committee represented by Public Health Foundation of India and Academy of Scientific and Innovative

research. Decisions taken by the selection committee will be final. The selection into the 5 year program does not guarantee entry into PhD program. Selection for PhD will be made strictly on the basis of merit and performance in the MSc program.

The final selection of the candidate is based on qualifications, relevant experience, statement of purpose and interview. The weightage for each component will be as follows:

Qualifications	-	30%
Relevant experience	-	30%
Statement of purpose	-	10%
Interview	-	30%
Total	-	**100%**

Decisions taken by the selection committee will be final.

TEACHING AND TRAINING METHODOLOGY

The course utilizes a variety of teaching/ learning techniques, which includes lectures, group discussions, student presentations, hands on practice in statistical soft wares in computer labs, basic sciences laboratory, workshops and field visits. During the internship the students will get an opportunity to engage in research related activities that could be based in a community, hospital or a laboratory.

FACULTY

A team of specialist faculty from diverse streams from Public Health Foundation of India and Academy of Scientific and Innovative Research would be engaged in teaching. The students will also be exposed to lectures delivered by invited faculty of national and international acclaim. Guides will be identified from both the organizations for mentoring during the internship and project work.

CREDIT AND EVALUATION SYSTEM

The program will follow a credit system consistent with AcSIR norms. Credits are awarded for successful completion of each course (module) and thesis. A total of 64 credits need to be earned for award of the degree. Student evaluation for each course (module) would be through a concurrent internal assessment during course work (that includes assignments, attendance and class room participation) and marks scored in the end of semester proctored examination. The weighted average of both will contribute to the course (module) GPA. A detailed evaluation framework will be provided to the students before the beginning of the course.

PROGRAM FEES

The fee structure for MSc (Health Informatics) program for the candidates in the year 2013-14 will be as follows:
For Indian Nationals
1. Tuition Fee: The annual tuition fee for the academic year 2013 - 14 is INR 1.25 Lakhs per student.
2. Hostel Fee: The hostel fee per student will be INR 1.25 Lakhs for one year (Hostel fee covers accommodation and food). Hostel facility is optional.

For International Candidates
1. Tuition Fee: The annual tuition fee for the academic year 2013-14 is USD 4,600 per student.
2. Hostel Fee: The hostel fee per student will be USD 2,400 for one year. (Hostel fee covers accommodation and food). Hostel facility is optional.

They will also be encouraged to apply for research fellowships offered by various organizations. Candidates from SAARC countries and Afghanistan will also be charged on par with Indian candidates.
Scholarship: Limited number of scholarships for M Sc may be awarded for the deserving and meritorious candidates, subject to availability of funds.

PLACEMENT OPPORTUNITIES

The internship during the Masters program would provide the candidate an opportunity to interact with potential researchers. The setting may be a hospital, research organization or the pharmaceutical industry. The placement cell will also strive to arrange for campus interviews with companies needing health informatics expertise. However, no formal guarantee will be provided to any candidate regarding future job selection after the completion of the program.

ABOUT PUBLIC HEALTH FOUNDATION OF INDIA (PHFI)

PHFI, a public-private partnership endeavour is a large uniquely designed & sustainable response to the service shortfall of public health professionals in India. PHFI was launched on March 28, 2006 at New Delhi. It is autonomously governed and is managed by a fully empowered, independent governing board that is represented by multiple constituencies- government, philanthropists and leading Indian and international professionals.

The PHFI's charter includes setting up of institutes for and training, assisting in the enhancement of capacity of existing public health training institutions, pursuing vigorous research and advocacy efforts on public health and related issues. Please visit **www.phfi.org** for more information.

The Indian Institute of Public Health (IIPH) Hyderabad commenced its activities on July 1, 2008, with a mission to deliver public health education, pursue research and advocacy and support policy development. It lays strong emphasis on pursuing public health policy, practice, training and research, positioning its programmes according to the public health priorities of the state and the nation. The institute has brought together a highly qualified and diverse faculty, of nationally and internationally trained and extremely motivated public health academics and practitioners. It aims to create an environment that supports excellence in instruction, research and practice.

ABOUT ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH (AcSIR)

The Academy of Scientific & Innovative Research (AcSIR) has been established as an 'Institution of National Importance' with a view to maximize the number of qualified researchers

Integrated MSc & PhD in Health Informatics

and professionals of impeccable quality in the domain of science & engineering; and to equip them with the skills to innovate and conduct seamless interdisciplinary research. AcSIR was established by an Act of Parliament, the Academy of Scientific Innovative Research Act, 2011 vide The Gazette of India No.15 dated February 7, 2012 and notified on 3rd April 2012.

The Academy has adopted the mandate to create and train some of the best of tomorrow's science and technology leaders through a combination of innovative and novel curricula, pedagogy and evaluation. AcSIR's focus will be on imparting instructions in areas that are not routinely taught in regular academic universities in India. AcSIR also provides research opportunities in these areas with the help of 37 CSIR laboratories. Some of the CSIR laboratories will be involved in the delivery of the Health Informatics course. Please visit http://acsir.res.in for more information.
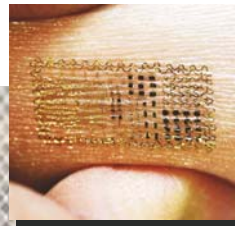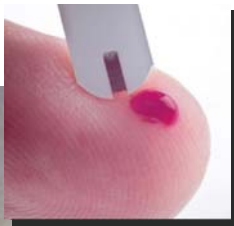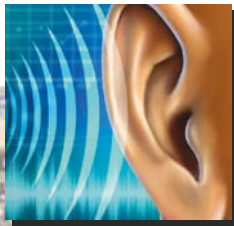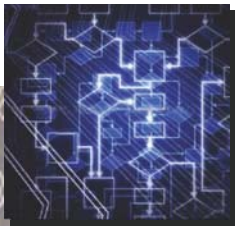
UNIQUENESS OF THE PROGRAM

This Health Informatics program is a blend of principles of basic and advanced research and its application in health sector. It supports AcSIR's mission and vision of affordable health care by advancing knowledge and technology. It also fulfils PHFIs mandate of improving research by imparting training to health care professionals.

This program delivered by PHFI in partnership with AcSIR aims to contribute in innovative ways to promote health and improve patient management in India. During the academic tenure, apart from the program activities and academic support from the faculty, the students will be exposed to series of workshops relevant to the specific course (modules) and due importance will be given to impart soft skills that enhance their placement opportunities. Successful completion of the MSc program may serve as excellent foundation to go on to take higher degrees like PhD (within and outside India).

OTHER PROGRAM IN COLLABORATION WITH AcSIR
INTEGRATED MSc & PhD IN CLINICAL RESEARCH

Integrated MSc & PhD in Clinical Research is a full time program being offered jointly by Public Health Foundation of India (PHFI) and Academy of Scientific and Innovative Research (AcSIR) from the current academic year (2013) at the Indian Institute of Public Health - Delhi. This multi-disciplinary program focusses on the scientific, ethical and operational issues related to clinical research. This Clinical Research program is a blend of principles of basic and advanced research and its application in health sector. Log on to www.phfi.org for more information about this program.

KNOWLEDGE TO ACTION
phfi
PUBLIC HEALTH FOUNDATION OF INDIA

AcSIR
Academy of Scientific and Innovative Research

For more information about the program and to download the program brochure and application form
visit: www.phfi.org
Please send your filled application form to the address given below:
The Director
Indian Institute of Public Health – Hyderabad
Plot No. 1, A N V Arcade, Amar Co-operative Society, Kavuri Hills, Madhapur, Hyderabad- 500033
Phone No. 040-49006000, Fax No. 040-49006060
E-mail: acad@phfi.org