Research Focal Areas of the Department

Air pollution and health effects in rural and urban populations of rapidly developing countries

Populations in rapidly developing countries face an enormous health burden from air pollution on account of high and often extreme exposures to emissions from a variety of sources in the household, ambient and occupational environments. The EHE team has led large scale exposure measurement exercises across multiple states in India as well as assisted in scoping exposure assessment methods in many Asian countries. The research specifically address the heterogeneity and complexity of air pollution exposure profiles experienced by both rural and urban populations. Collectively, these studies have generated an expansive base of exposure information, informing both regional and global efforts to estimate the health effects of air pollution and disease burdens. They have also informed the intervention efforts related to household air pollution from cooking-fuels in rural communities.

Assessing neuro-behavioral impacts of lead in children in India

Despite the phasing out of leaded gasoline in the late 1990s, exposures to lead continue to pose health risks for children in India. The EHE team has been involved in a long-term collaboration with investigators at Harvard University to profile the exposures in children as well as assess associated neuro-behavioural impacts and the role of gene-polymorphisms in effect modification. These studies provide some of the first continuous exposure-response relationships for lead and neuro-behaviour in India.

Climate change, heat stress and worker productivity

Occupational heat stress is rapidly becoming a major concern for worker productivity in the face of climate change. The EHE team is mapping vulnerabilities for impacts of heat stress on workers across multiple industrial sectors.

Developing academic and research infra-structure for environmental and occupational health in India

The department has been involved with a network of more than 50 national and international organizations for research and training collaborations, the most notable amongst them being the collaboration with UC Berkeley under support from the ITREOH program of The Fogarty International Center and the International Integrated Experts Program of the GTZ. The department also provides routine occupational safety and health consultancy services to a wide spectrum of industries.

Why do we need for Public Health Professionals

- There is an imminent need for developing and implementing public health policies and programs in the face of emerging health transition in order to manage
    - o new communicable diseases (like the COVID-19 pademic), as well as
    - o increasing incidence of non-communicable diseases (WHO estimate – Deaths due to non-communicable diseases such as air pollution amount to as much as 8.2 million).
- Moreover, the World Health Organization (Calcutta Declaration) has also emphasized the need for Public Health training.
- Government of India has highlighted that a large number of specialists should be trained in Public Health (National Health Policy, 2002).
- There is a growing demand for professionals with sound scientific knowledge and skills in the service of Public Health.

Facilities and Research Activities of the Department

CONTACT INFORMATION

Dept. of Environmental Health Engineering
Sri Ramachandra Faculty of Public Health

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DEPARTMENT OF ENVIRONMENTAL HEALTH ENGINEERING

SRI RAMACHANDRA FACULTY OF PUBLIC HEALTH

Bachelor of Science in Public Health (Full time – 3 Years)

A WORLD HEALTH ORGANIZATION
COLLABORATING CENTER
FOR OCCUPATIONAL & ENVIRONMENTAL HEALTH

SRU-ICMR CENTER FOR ADVANCED RESEARCH ON
AIR QUALITY, CLIMATE AND HEALTH

NIHR GLOBAL HEALTH RESEARCH CENTRE ON NCDS
AND ENVIRONMENTAL CHANGE

About SRIHER

Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) was established by Sri Ramachandra Educational and Health Trust in the year 1985 as a private not-for-profit self-financing institution and dedicated to serve the society as a centre of excellence with emphasis on medical education, research and healthcare. Over three decades, the institute has transformed into a full-fledged Deemed to be University with 14 constituent colleges offering over 150 UG and PG programs in healthcare sciences. The university is spread over 150 acres, with a refreshingly-green campus. The university is awarded with several national and internaltional accreditations, few of which are below.

- Graded by UGC as **Category I University** for maintaining consistently high academic standards.
- Accredited by NAAC with **"A++" Grade.**

SRI RAMACHANDRA FACULTY OF PUBLIC HEALTH

WHO Global Network of CCs in Occupational and Environmental Health

www.who.int/occupational_health

The Department of Environmental Health Engineering, Sri Ramachandra Faculty of Public Health, Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) was set up, as a part of the Basic Science Research Wing of the University in 1998 with the aid of financial assistance provided by the United Nations Industrial Development Organization (UNIDO). The department originally set up to provide occupational safety and industrial hygiene monitoring services to the leather/tanning industry in Tamil Nadu, has since then diversified to Acadamic, Research and Training in this area of occupational and environmental health.

- The Department serves as a **World Health Organisation Collaborating Center. Being one of only 3 such centers in the South East Asia region,** the center is a leading contributor to research and training in recognition, evaluation and management of environmental and occupational health risks.

- The department is recognised as a Center For Advanced Research on Air Quality, Climate and Health by the Indian Council of Medical Research, Govt. of India .

- The department is also recognised as NIHR global health research centre on NCDS and environmental change.

- The main emphases of the department research programs include **air pollution and health risk assessments, occupational hygiene & health, and policies related to environmental health.**

- With more than 2 decades of experience in global environmental health research, students can expect to receive world class training within and outside the classroom that will include opportunities for research, and industrial rotations.

- The faculty collaboration spans across more than 50 national and international institutions.

INTRODUCTION ABOUT THE B.Sc. IN PUBLIC HEALTH PROGRAM

- The duration of B.Sc.Public Health program shall be THREE academic years comprising of six semesters.

- The program
  - introduces the student to the concepts of public health
  - orients on the basics of medical sciences,psychology. social sciences and toxicology
  - explores the key areas ofwater, sanitation and environmental pollution
  - emphasizes the importance of public health nutrition, and prevention of communicable & non-communicable diseases
  - focuses on public health needs of special groups
  - trains in communication skills, health education & communication, health administration & promotion, health economics & informatics
  - imparts the basic knowledge on public health ethics & law and policy, and basic training on food safety and quality control
  - prepares for conducting public health research and managing projects

FIELD PRACTICUM

- The program provides extensive practical/field experience in public health practice, with a dedicated & comprehensive coverage across 3 semesters

PROGRAM ELIGIBILITY

HSC/CBSE/ISC or equivalent examination
- In any stream

ELIGIBILITY FOR HIGHER STUDIES

After successful completion of their under graduation,these students can pursue higher studies in the areas of

- **Public Health**
  - MPH (All Streams)
- **Health Sciences**
  - Anatomy, Physiology, Biochemistry, Microbiology
- **Population Science**
  - Epidemiology, Biostatistics
- **Data Science**
  - Health Informatics, Bioinformatics
- **Humanities**
  - Psychology, MSW, M.Sc. Sociology
- **Management / Administration**
  - MBA – Health Administration, Health Economics
- **Others**
  - Toxicology, Health Policy

CAREER/ PLACEMENT OPPORTUNITIES

- Colleges and Universities
  - **Higher Studies / Research Project Assistant**
- Laboratories
  - **Technician / Analyst in Food quality Testing**
- Research and Development & NGOs
  - **Project Supervisor / Field Coordinator, Social Worker**
- Community Development Blocks
  - **Public Health Manager**
- Corporations / Municipalities
  - **Health Inspector*, Food Inspector^**
- Health Department
  - **Health promotion staff**

* - An additional course might have to be completed (as per regional requirement)

^ - A qualifying exam has to be cleared

COURSE FEE

The tuition fee per academic year is Rs.75,000/-

DATE OF ADMISSION

Advertisement for admission will be published in the leading Newspaper as well as in the University Website during the month of April and the classes will commence normally from 2nd week of June of the academic year.