





UNDER THE AEGIS OF SOCIETY FOR RADIATION RESEARCH (SRR) - INDIA

3rd INTERNATIONAL SCHOOL ON RADIATION RESEARCH (ISRR - 2023)

SEP 22nd & 23rd 2023

BIOMARKERS IN
RADIATION RESEARCH:
FROM RADIATION
EXPOSURE TO
COUNTERMEASURES

IMPORTANT DATES

Registration & Student

Travel Grant Submission:

Opens: June 15, 2023

Closes: August 15, 2023

Intimation of Travel Award:

August 30, 2023

For further details:

https://srrindia.org/

isrr23.hg@gmail.com

srrindia1415@gmail.com

ORGANISED BY

DEPARTMENT OF HUMAN GENETICS

FACULTY OF BIOMEDICAL SCIENCES & TECHNOLOGY
SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION & RESEARCH

(DEEMED TO BE UNIVERSITY)

PORUR, CHENNAI - 600 116

The Department of Human Genetics, Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) (SRIHER, DU) & the Society for Radiation Research (SRR) jointly organizing the Third International School on Radiation Research-2023 (ISRR-2023) on the theme, "Biomarkers in Radiation Research: From Radiation exposure to Countermeasures" during 22nd & 23rd September 2023.

ABOUT THE HOST INSTITUTION

Sri Ramachandra Institute of Higher Education and Research (Deemed to be University), ranked among the top health sciences universities in India, had its origin as Sri Ramachandra Medical College and Research Institute which 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 serving the society as a centre of excellence with emphasis on medical education, research and health care. The Trust achieved the task of establishing the Institution as a "Centre of Excellence" under the leadership of Late Shri. N. P. V. Ramasamy Udayar was the Founder & Managing Trustee of the Trust and also the first Chancellor of the Deemed University. Shri. V. R. Venkataachalam is currently the Chancellor of the Deemed University and is also the Managing Trustee of the Trust. Shri R.V. Sengutuvan is the Pro-Chancellor of the Deemed University. Over three decades, the institute has transformed into a full-fledged Deemed University and presently has fourteen constituent colleges. The Deemed University has been graded as Category I Status by the UGC in 2018. It has also has achieved the distinction of being placed at the 48th rank among all Universities in India by the MHRD NIRF Ranking 2021. The National Assessment and Accreditation Council (NAAC) has reaccredited (in cycle-3) SRIHER (DU) with "A++" Grade with a CGPA of 3.53 on a 4-point scale, the highest to be awarded to a private medical Deemed University in India.

For more details on the institution please visit https://www.sriramachandra.edu.in/

ABOUT THE DEPARTMENT

The 25-year history of the **Department of Human Genetics** is, in many ways, a microcosm of the fields of human genetics, genomics, and genetics education. Beginning as a cluster of basic scientists on the margins of human health care, the Department has expanded in faculty numbers and research breadth. It has the dual challenge of promoting excellence in research and teaching in the basic science of human genetics and also a similar challenge for excellence in professional training and patient care. With the combined support and investment from the University and Medical Hospital, the department has yielded a vibrant and innovative community of teachers, scientists and entrepreneurs. The department is accredited by two key agencies; National Accreditation Board for Testing and Calibration Laboratories (NABL) and Atomic Energy Regulatory Board (AERB). NABL has certified a range of genetic tests offered by the department since 2005, a testimony to the quality of reporting performed by the department. Our state-of-the-art image analysis system is a feather in the cap enabling us not only increase the rate of reporting but allow inter and intra students to have a first-hand experience with automated karyotyping. In addition, AERB accredited the department as a center for **Bio-dosimetry** for suspected occupational over-exposure assessment between **2011 to 2021**, now we are in the process of changing the accreditation under NABL. This is an honour that no other private lab in the south India has and also putting as on the map with WHO BioDoseNet and RENEB, a global network of biodosimetry laboratories whose role is to support management and decision-making in cases of large radiation emergency events.

ABOUT THE SOCIETY FOR RADIATION RESEARCH

The Society for Radiation Research (SRR) is a scientific body of radiation researchers and individuals/students having an interest in the area of radiation research. The SRR has been registered in December 2014 in Mumbai by a group of scientists and clinicians. Society for Radiation Research is aimed to (i) Promote research in the areas of radiation biology, clinical radiation biology, oncology, radiation hormesis and low dose radiation biology, environmental radiation biology, nuclear medicine, radiation technologies, terrestrial and space radiation biology, and any other relevant research areas. (ii) Facilitate integration of relevant radiation research areas. (iii) Promote the diffusion of knowledge in these areas through organizing meetings, conferences, workshops, awareness programs, scientific publications etc. (iv) Promote discussion, and interactions amongst scientist-public industry and acting as liaison to communicate facts and research developments to the public, government and regulatory bodies. (v) Integration of Society with other National and International Scientific Bodies. (vi) Encourage and promote young researchers and students to pursue research and build careers in the areas of radiation research. (vii) Promote and facilitate the education of radiation research in national Institutes and Universities. Journal of Radiation and Cancer Research (JRCR) is an official publication of SRR, published by Wolters Kluwer Publishers, Mumbai.

Journal web page: http://www.journalrcr.org/

For further details about SRR, please visit: www.srrindia.org

ABOUT THE SCHOOL

Society for Radiation Research (SRR) organizes International School on Radiation Research with a specific theme to educate/train young researchers and students from India and around the world. First International School of Radiation Research (ISRR-2017) was organized in Feb 2017 at Annamalai University, Chidambaram on with Theme "Radiation Carcinogenesis: Mechanism and Experimental Models". The Second International School on Radiation (ISRR-2020) was organized online in Sept 2020 (due to Covid pandemic) on theme "Radiation Induced DNA Damage Response: Mechanisms and Human Health Implications". In this series, the Third International School on Radiation Research (ISRR-2023) on the theme "Biomarkers in Radiation Research: From Radiation Exposure to Countermeasures" will be organised during September 22-23, 2023 at Sri Ramachandra Institute of Higher Education and Research (SRIHER), Porur, Chennai, Tamil Nadu, India.

Higher doses of radiation exposure, whether accidental or occupational or environmental can have health consequences. The effects of radiation at low doses are also of great interest to understand associated health risk. Radiation-induced biomarkers manifest at cellular, molecular and physiological levels depending on external or internal radiation exposure. They encompass DNA damage, chromosomal aberrations, changes in gene/protein expression, signalling pathways, epigenetic modifications etc. Identifying reliable biomarkers enhances our understanding of the radiation biology of individual susceptibility and potential therapeutic targets. Furthermore, biomarkers facilitate the assessment of doses encountered; to develop suitable countermeasures and management strategy/medical management.

Moreover, suitable biomarkers in cancer radiotherapy could serve as prognostic and predictive strategies for cancer radiotherapy. The development of suitable biomarkers in radiation exposure conditions is an essential strategy for assessing damage, monitoring treatment response and developing targeted therapies in cancer and minimizing their adverse impact on human health.

The School aims to provide young researchers and students a comprehensive knowledge and understanding of the latest advancements and discoveries in the research field via lectures by eminent scientists and experts from India and abroad. It offers a platform for the participants to interact and network with experts and fellow peers for mentorship opportunities and potential collaborations. The School also includes demonstration/hands-on training session(s) by faculties with research expertise, allowing participants to gain practical skills in biomarker analysis techniques and experimental methodologies.

The number of participants would be limited to ~150.

The workshop would be in English.

REGISTRATION

Interested participants should submit a *soft copy* of the duly filed and signed registration form along with payment details on or before **August 15**, **2023** using the link provided on https://srrindia.org/. Participation confirmation is subject to payment of the registration fee.

Registration Fee includes tea/coffee, lunch and dinner during the School. Registration Fee does not include accommodation charges. The Registration Fee can be paid via online/bank transfer as details provided "SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION & RESEARCH (DU)" City Union Bank, AYYAPANTHANGAL BRANCH, Current Account (Ac.No.510909010044955; IFSC/RTGS-CIUB0000300; MICR Code-600054038).

Based on the need, selected participants will be provided hostel/guest house accommodation at the University campus on payment basis.

Participants must take care of their travel arrangements.

For selected participants travel reimbursement will be given, with prior application along with the registration. Refer to "Travel Awards".

REGISTRATION FEE*

Student/RA/Post-Doc (Indian): Rs. 2000/-Faculty (Indian): Rs. 3500/-

• Overseas participants should complete online registration before deadline and pay registration fee in Indian Rupees at registration counter at the time of School.



TRAVEL AWARD



The School would provide a limited number of travel awards to Indian students, who do not have travel support through fellowship/grant/Institute, for which students need to submit their application in the attached format on or before **August 15**, **2023**, while online registration of ISRR 2023. Onward-return travel by *3-tier* (shortest route) fare would be reimbursed. Preference would be given to students working in the research areas relevant to the School to Ph.D. students, Post Doc, Research Associates. Shortlisted students would be intimated on/before **August 30**, **2023**.

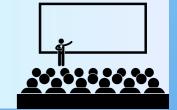
AWARD

There would be participation/other award(s) for the participants which would be announced during the School.

MAJOR TOPICS TO BE COVERED

The School will provide sessions by distinguished faculties from national and international institutes covering a wide range of topics as mentioned below:

- Radiation interactions/measurements
- Biomarkers vs Biodosimeters
- Cytogenetic biomarkers
- Chromosomal Aberration Calculation Software (CABAS) & dose estimation
- Emerging biomarkers
- Radiation Countermeasures
- Decontamination of internal radionuclides
- Need and means of Inter-Laboratory Comparison
- ISO standards and biodosimetry



DEMONSTRATIONS

Additionally, the following techniques will be demonstrated during the School.

- Lymphocyte culture
- Aberration Analysis
- Standard Operating Procedure (SOP) development for Biodosimetry
- Dose estimation



PATRONS

- Shri V.R. Venkataachalam, Chancellor, **SRIHER**
- Shri R.V. Sengutuvan, Pro-chancellor, **SRIHER**
- Dr Uma Sekar, Vice-chancellor, SRIHER
- Dr Mahesh Vakamudi, Pro Vice-Chancellor, SRIHER
- Prof. Kalpana Balakrishnan, Dean-Research SRIHER

SRR EXECUTIVE COUNCIL (2023-25)

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Vice President: Prof. Venkatachalam

Perumal, Chennai

Secretary: Dr Amit Kumar, Mumbai

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Dr Sandeep Shukla, Delhi

Dr T. Verma, Lucknow

Prof. Vandana Jain, Ahmednagar

Founder President, SRR and Editor-in-Chief,

Journal of Radiation and Cancer Research

Dr K. P. Mishra, Mumbai

Past President, SRR (Ex-Officio) Dr Shyam Shrivastava, Navi Mumbai

Editor-in Chief, Journal of Radiation and Cancer Research Dr Nagraj Huilgol, Mumbai

(Listed alphabetically) (Tentative)

Dr Amit Kumar

BARC, Mumbai

Dr Andrew Wojik

University Hospital of Geneva, Switzerland

Dr Annalakshmi O.

ICGAR, Kalpakkam

Dr Balajee A. S.

Oak Ridge Institute for Science and Education, USA

 Dr Choudhary N. K. INMAS, DRDO, New Delhi

Dr Dindial Ramotar

Hamad Bin Khalifa University, Qatar

Dr Elizabeth Anisbury

K Health Security Agency, Cytogenetics and Pathology Group, Centre for Radiation, Chemical and Environmental Hazards Division, UK

Dr Kai Rothholm

University Medical Center Hamburg, Germany

Dr Prasanna G. S.

AFRI, USA

Mr Panneersevam S.

SRIHER (DU), Chennai

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Annamalai University, Chidambaram

Dr Rajesh Chourasia

BARC, Mumbai

Dr Sateesh Rao B. S.

Manipal University India, Manipal

Mr Senthil Kumar M.

AERB, Regional Office, Chennai

Dr Tamizhselvan G.

K.S. Hegde Medical Academy, NITTE, Mangalore

Dr Venkateswaralu Raavi

Sri Devaraj Urs Academy of Higher Education and Research, Kolar

Dr Vijay Singh

Uniformed Services University of the Health Sciences, USA







ADVISORY COMMITTEE (ISRR 2023)

(Listed alphabetically)



- Asnani, C. K.
 UCIL, Mumbai
- Aswal, D. K.
 BARC, Mumbai
- Badwe, R.
 TMC, Mumbai
- Bilimagga, R. HCG, Bengaluru
- Borthakur, B. B.
 B. Barooah Cancer Inst., Guwahati
- Chakrabarti, Jayanta CNCI, Kolkata
- Ghanty, T. K.
 BARC, Mumbai
- Gupta, Sudeep
 ACTREC, Navi Mumbai
- Howell, Roger
 NJMS Cancer Center, USA
- Huilgol, N.
 Nanavati Hospital, Mumbai
- Iliakis, George
 University of Duisburg-Essen,

 Germany

- Karhadkar, C. G. BARC, Mumbai
- Matsumoto, Y.
 Tokyo Institute of Technology, Japan
- Mishra, A. K.
 INMAS, New Delhi
- Mishra, K. P. Ex-BARC, Mumbai
- Mittal, J. P.
 UM-DAE-CEBS, Mumbai
- Mukherjee, P. BRIT, Mumbai
- Panda, C. K. CNCI, Kolkata
- Pandey, A.C
 IUAC, Delhi
- Pathak, B. C. NPCIL, Mumbai
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 IISc, Bengaluru
- Sapra, M. K. BRNS, Mumbai
- Satish, Rao B. S. Mu, Manipal

- Satish Srinivas K.
 SRIHER (DU), Chennai
- Shimada, Y. IES, Japan
- Shrivastava, S. K. Ex-TMH, Mumbai
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- Singh, V. K. AFRRI, USA
- Tashiro, Satoshi Hiroshima University, Japan
- Tyagi, A. K.
 BARC, Mumbai
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- Venkataraman, B. IGCAR, Kalpakkam
- Venkata Sai P. M.
 SRIHER (DU), Chennai
- Velmurugan J.

 Anna University, Chennai

ORGANIZING COMMITTEE

(Listed alphabetically)



- Dr Mohanapriya C. D.
- Ms Nandhini B.
- Dr Rajesh G.
- Dr Ravi Maddaly
- Dr Solomon F.D. Paul
- Dr Teena Koshy Secretary
- Dr Venkatachalam P. Convener
- Dr Vijayalakshmi J.
- Dr Vettriselvi V. Treasurer

Dr B. N. Pandey BARC, Mumbai (Chairman, SRR Academic Committee)



