

# **INDO-SWEDISH CONFERENCE AND WORKSHOP**

**Conference On  
CLINICAL, EPIDEMIOLOGICAL AND EXPERIMENTAL APPROACHES  
TO ASSESS AIR POLLUTION RELATED CHRONIC HEALTH  
EFFECTS (CEEARCH)**

**(Focus area: Respiratory, Cognitive, Exposure assessment)**

**Workshop On  
METHODS IN MOLECULAR BIOLOGY, CYTOGENETICS AND CELL  
CULTURE**

**Jointly Organized by**

**The Departments of Respiratory Medicine, and Biochemistry,  
Center of Excellence in Molecular Biology and Regenerative Medicine (CEMR)  
Laboratory,**

**In Association With**

**Special Interest Groups in Cancer Biology and Cancer Stem Cells and  
Environment and Respiratory Diseases, JSS Medical College,**

**JSS ACADEMY OF HIGHER EDUCATION & RESEARCH, INDIA**

**And**

**KAROLINSKA INSTITUTET, SWEDEN**



**January 6<sup>th</sup>-10<sup>th</sup> (Monday-Friday), 2020**

**Venue: Sri Rajendra Auditorium, JSS Medical College,**

**JSS Academy of Higher Education & Research, Mysuru, Karnataka, India.**

## **PATRON**

**His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji**

President, JSS Mahavidyapeetha

Chancellor, JSS Academy of Higher Education & Research

## **CO-PATRONS**

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Pro-Chancellor, JSS Academy of Higher Education & Research

**Dr. Surinder Singh**

Vice-Chancellor, JSS Academy of Higher Education & Research

**Dr. Basavanagowdappa**

Principal, JSS Medical College, JSS Academy of Higher Education & Research

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<b>ORGANIZING CO-CHAIRMAN – INDIA</b> Dr. Jayaraj B. S.	<b>ORGANIZING CO-CHAIRMAN – INDIA</b> Dr. Suma M. N.
<b>ORGANIZING SECRETARY - INDIA</b> Dr. SubbaRao, V. Madhunapantula	<b>ORGANIZING SECRETARY - SWEDEN</b> Dr. Swapna Upadhyay

<b>Day 1: Monday, 6<sup>th</sup> January 2020</b>		
<b>INAUGURAL SESSION</b>		
9.00-9.30h	Inauguration and Opening Remarks	Dr. Surinder Singh
9.30-10:30	Keynote Address JSS Medical College and Hospital, India	Prof. Mahesh PA The past, present and future of MUDHRA cohort
10.30-11.00h	<b>Tea and Coffee Break</b>	
<b>SESSION 1: 11.00-13.00h</b>	<b>COMPLEXITIES OF ADDRESSING AIR POLLUTION MEDIATED HEALTH EFFECTS</b>	
11.00-11.30h	Prof. Kjell Larsson Karolinska Institutet, Sweden	Strengths and weaknesses in real life COPD studies
11.30-12.00h	Dr. Sri Harsha Kota Indian Institute of Technology Delhi	Mortality associated with different sources of PM 2.5 in India
12.00-12.30h	Dr S. P. Goswami All India Institute of Speech and Hearing, AIISH, Mysore	Use of Narrative Methods in Research
12.30-13.00h	Dr. Koustav Ganguly Karolinska Institutet, Sweden	Integrating epidemiological, clinical and basic research: The vision for MUDHRA study
13.00-14.00 h	<b>Lunch</b>	
<b>SESSION 2 14.00-16.00h</b>	<b>EXPOSURE ASSESSMENT</b>	
14.00-14.30h	Prof. Gunnar Johanson Karolinska Institutet, Sweden	Overview of methods for personal exposure monitoring of airborne pollutants
14.30-15.00h	Dr. Mukesh Khare Indian Institute of Technology, Delhi	Urban Air Pollution in India: Current Scenario
	<b>Tea and Coffee Break</b>	
15.00-15.30h	Dr. Krystal Pollitt Yale University, USA	Writing Your Exposure Biography using Wearable Passive Air Samplers
15.30-16.00h	Dr. Pallavi Pant, Health Effects Institute, Boston, MA, USA	Exposure to air pollution in India: Current status

<b>Day-2. Tuesday, 7<sup>th</sup> January 2020</b>		
<b>SESSION 1 9.00-10.30</b>	<b>LUNGS AND BEYOND</b>	
9.00-9.30h	Dr. Kalpana Chandra Medical Officer, Delhi Jal Board, New Delhi	Respiratory impact of occupational inhalational exposure in sewage workers
9.30-10.00h	Dr. Murali Krishna CSI Holdsworth Memorial Hospital, Mysore, India	Lung function and cognition
10.00-10.30h	Dr. Mina Chandra Post Graduate Institute of Medical Education and Research & Dr. Ram Manohar Lohia Hospital, New Delhi, India	Air-pollution and cognition
<b>10.30-11.00h</b>	<b>Tea and Coffee Break</b>	
<b>11.00-13.00h</b>	<b>SESSION 2: EXPERIMENTAL APPROACHES</b>	
11.00-11.30h	Prof. Lena Palmberg Karolinska Institutet, Sweden	In vitro models to study mechanisms behind development of chronic bronchitis and COPD caused by environmental factors
11.30-12.00h	Dr. U. Mabali Rajan Indian Institute of Chemical Biology, Kolkata	In Vivo models to study environmental lung diseases
12.00-12.30	Dr. Lena Ernstgård Karolinska Institutet, Sweden	Exposure system for vapor exposure of cells at air liquid interface
12.30-13.00	Dr. Swapna Upadhyay Karolinska Institutet, Sweden	The scope of natural protective compounds as a nutritional supplementation strategy: Translating bench to home
13.00-14.30h	<b>Lunch (Poster Presentation)</b>	
14.30-15.00h	<b>The SRM-DBT Platform for advanced Life Science Technologies: Facilities and services</b> Prof. M. Vairamani, Dr. K.M. Ramkumar and Dr. Padma Sandeep Koka; SRM Institute of Science and Technology	
<b>15.00-16.00h</b>	<b>VALEDICTORY</b>	

## **WORKSHOP ON METHODS IN MOLECULAR BIOLOGY, CYTOGENETICS, AND CELL CULTURE**

### **Day 3: 8<sup>th</sup> January 2020 (Wednesday) Workshop on Cell Culture Techniques**

**Venue: CEMR Laboratory, JSS Medical College, JSS AHER**

#### **Session I:**

9:00am – 9:30am: Lecture #1: Fundamentals and Applications of Cell Culture in Drug Discovery –

Dr. SubbaRao

9:30 – 10:00am: Lecture #2: Good cell culture practices – Dr. Divya

#### **Workshop:**

10:00 - 10:45am: Revival, splitting, cell counting, maintenance and freezing of cell lines

10:45 –11:00am: Tea & Coffee Break

11:00 – 1:00pm: Gene knockdown using siRNA

1:00 – 1:30pm: Lunch

1:30 – 3:00pm: Plating of cells in to 96-well plates and treatment of cells with drugs (using a plate ready for treatment)

3:00 – 3:15pm: Tea and Coffee Break

3:15 – 4:00pm: Cell viability assay (MTT/MTS/SRB)

4:00 – 5:00pm: Isolation of DNA and RNA from cell lines

### **Day 4: 9<sup>th</sup> January 2020 (Thursday) Workshop on PCR Techniques**

**Venue: CEMR Laboratory, JSS Medical College, JSS AHER**

#### **Session-II:**

9:00 to 9:30am: Lecture #3: Fundamentals and applications of PCR – Dr. Rajeshkumar

9:30 to 10:00am: Lecture #4: Gene knockdown using siRNA – Dr. Prasannakumar

#### **Workshop**

9:45 to 11:00am: Isolation of RNA from knockdown cells

11:00 to 11:15am: Tea & Coffee Break

11:15 to 1:00pm: Preparation of the bleach gel and RNA quality analysis, c-DNA synthesis

1:00 to 1:30pm: Lunch

2:00 to 4:00pm: Analysis of the expression of genes at mRNA level using qPCR (SYBR method)

4:00 to 4:30pm: Conclusion of the session

**Day 5: 10<sup>th</sup> January 2020 (Friday) Workshop on Karyotyping**

**Venue: Clinical Genetics Laboratory, JSS Hospital, JSS AHER**

**Session-II:**

9:00 to 9:30am: Lecture #5: Use of karyotyping in diagnosing chromosomal abnormalities – Dr. Akila Prashant

9:30 to 10:00am: Lecture #6: Karyotyping Applications in Disease Diagnosis – Dr. D. Devanand

**Workshop**

9:45 to 11:00am: Karyotyping

11:00 to 11:15am: Tea & Coffee Break

11:15 to 1:00pm: Analysis of the Karyotyping data

1:00 to 1:30pm: Lunch

2:00 to 4:00pm: FISH Technology - Demonstration

4:00 to 4:30pm: Valedictory



## INDO-SWEDISH CONFERENCE AND WORKSHOP

### Conference On Clinical, Epidemiological and Experimental Approaches to Assess Air Pollution Related Chronic Health Effects (CEEARCH)

### Workshop On Methods in Molecular Biology, Cytogenetics and Cell Culture January 6<sup>th</sup>-10<sup>th</sup> (Monday-Friday), 2020

## REGISTRATION FORM

(Scan and send. Photocopies of the registration form are also accepted)

Name:

Designation:

Institution:

Address:

Mobile No.:

Email ID:

Registration for (a) Conference/ (6<sup>th</sup> and 7<sup>th</sup> Jan 2020) – Rs. 2,000/-\*

(b) Workshop (8<sup>th</sup> Jan to 10<sup>th</sup> Jan 2020) – Rs. 6,000/-\*

(c) Conference and Workshop (6<sup>th</sup> to 10<sup>th</sup> Jan 2020) – Rs. 8,000/-\*

### Registration Fee Payment Details:

Demand Draft No:

Date:

Bank Name:

Transaction Reference No:

(RTGS/NEFT only)

(Signature)

### Payment Details:

1. Demand Draft should be drawn in favor of “JSS Medical College Seminar Account”, Payable at State Bank of India, S. S. Nagar, Mysuru, Karnataka.
2. RTGS/NEFT payments should be made to:  
Name of the account: JSS Medical College Seminar Account  
Account number: 64143204788,  
Bank: State Bank of India,  
Branch: S. S. Nagar branch  
IFSC code: SBIN0040547, Mysuru.

Note:

- First-come-first register basis for workshop (Limited seats 20 only)
- Abstracts: Please send your abstracts (in the format enclosed) for poster presentation before 21<sup>st</sup> December after registration. Selected abstracts for poster presentation will be intimated a week prior to the conference date
  
- **Send the scanned copy of registration form to**  
Dr. Asha Srinivasan, Assistant Professor,  
Division of Nanoscience and Technology,  
Faculty of Life Sciences, JSS AHER  
Phone: 9731981370;  
E-mail: [asha.srinivasan@jssuni.edu.in](mailto:asha.srinivasan@jssuni.edu.in)  
**Carbon copy to**  
Mr. Pushkal, S.R., CSIR-JRF,  
CEMR Laboratory,  
Department of Biochemistry,  
JSS Medical College, JSS AHER.  
Phone: 9900864233;  
E-mail: [pushkalbiochemystery@gmail.com](mailto:pushkalbiochemystery@gmail.com),
  
- **For any additional details, please contact, Dr. Asha Srinivasan or Mr. Pushkal. S.R.**

\* The registration fee includes breakfast and lunch, but doesn't include accommodation/transportation expenses. A conference and / or workshop kit will be provided for the registered participants. Registration is mandatory for submitting the abstract



## **ABSTRACT FORMAT**

Abstract (250 words excluding title, authors and author affiliations, Font to be used in the abstract: Arial)

- Title (Font size: 14 bold)
- Authors and affiliations (Font size: 12, Underline and bold the presenting author)
- Corresponding author (Font size: 12. Provide affiliation and contact details)
- Background
- Materials and Methods
- Results and Discussion
- Conclusions
- Study Limitations and Future Directions