

## **Press Release by the Indian Scientists' Response to CoViD-19 (ISRC) Group** 11 May, 2020

### **Conversations in the times of CoViD-19**

ISRC has launched a new call-in series [Be Covid Wise: Ask a Scientist](#) in which scientists engage in direct conversations with the public and disseminate scientific knowledge, bust hoaxes and discuss best practices during the Indian national lockdown. The first session of the series, scheduled on Tuesdays and Fridays, was hosted by *Aniket Sule* of *HBCSE* in Marathi and saw *Deepa Agashe*, an evolutionary biologist at *NCBS*, engaging in [lively conversations](#) with many curious citizens. The next session, in Hindi, will be held on Tuesday, 12 May at 6.00 pm and will feature *Pooja Sancheti* of *IISER Pune* and *Rohini Karandikar* from *Curiosity Gym*. "We are trying to communicate the authentic science related to the novel coronavirus and COVID-19 in the form of a dialogue with the public. Doing this in Indian languages will ensure that the correct information reaches and benefits a wide section of our country," says Rohini Karandikar.

The **Mental Health during COVID-19** series now offers a focus on children and their caregivers. Children and their parents are currently facing unprecedented circumstances due to physical distancing, closed schools and increased levels of stress. "Children are anxious and confused about the ongoing covid-19 pandemic. As parents, we need to be honest, caring, protective, and reassuring to help them sail through this crisis," says *Sathya Srinivasachari*, a science communicator and researcher. In this series, we offer some information to help parents and family members to understand how the emotional health of children can be impacted during this time, what might be some warning signs to look for, and how one can talk to and offer support to children.

In other science communication from ISRC, the **Daily Life and COVID-19** series explains hygiene. Cleaning surfaces is a critical defense against the coronavirus, and the story of *Shivani, the warrior with a dishcloth* offers facts and insight. A new series of [short videos](#) starts with guidelines for delivery workers. ISRC also *explains epidemiological models* in simple terms for the general public to understand why such models are needed, what the basic ingredients of such models are and what results one can expect.

"Our team of skilled translators come from diverse backgrounds and help present the stories and information in various Indian languages" says *Divya Oberoi*, from the National Centre for Radio Astrophysics, Pune. Our material has been translated into upto 12 languages and the website is now available in 9 language specific pages: Hindi, Bengali, Marathi, Telugu, Tamil, Kannada, Gujarati, Malayalam and Assamese.

ISRC is also starting a series of **national symposia** on specific themes related to CoViD-19. The first one was held on May 9, on [Modelling spread of COVID-19 epidemic in India](#). *Mukund Thattai* (*NCBS*) demonstrated how the spread of COVID-19 across districts, states, and the country could be understood in terms of a hierarchical model. *N. Anoop Krishnan* (*IIT Delhi*) presented the "PRACRITI" model, accounting for time-varying infectivity rates at district-level

within a compartmental model. *Gautam Menon (Ashoka University, Sonapat and IMSc, Chennai)* discussed the INDSCI-SIM model, an ISRC initiative, showing how various non-pharmaceutical interventions in the form of periodic or staggered lockdowns along with efficient quarantine and testing could be helpful in returning to work. A similar compartmental model, XSEAIIPR, was presented by *Sai Vijnanampathy (IIT Bombay)* incorporating healthcare preparedness, differential testing and transport data to examine how the spread is impacted. *Girish Setlur (IIT Guwahati)* presented a versatile compartmental model with original features. *Om Damani (IIT Bombay)* presented a systems dynamics model, including details of how the clinical process proceeds, which helps in planning containment strategies. Finally, *Rajesh Sundaresan (IISc, Bangalore)* and *Harshal Hayatnagarkar (ThoughtWorks, Pune)* separately presented large-scale agent based models for studying epidemic spread in cities like Mumbai and Bangalore, and explored some scenarios for mitigation and return to work post-lockdown. The symposium saw lively participation from the general public and scientists.

The new version of the **INDSCI-SIM model** examines different exit strategies from lockdown for a model Indian city affected by the epidemic. In the synchronous periodic lockdown, the entire workforce goes to work for a fixed number of days and then gets locked down for a fixed period, before the cycle repeats again. During asynchronous periodic lockdown, 1/3 of the workforce goes to work daily, while the other 2/3 is locked down, and each group's turn for work comes after a specific period, cyclically. The latter is shown to be more effective, and in combination with large-scale testing, tracing and quarantining, the stress on healthcare facilities can be reduced extensively, while keeping the economy moving.

### **General ISRC Resources for the Media and Public**

Indian Scientists' Response to CoViD-19 Website

<https://indscicov.in/>

Hoax Busters, Be Covid wise & ask a scientist links

<https://indscicov.in/busting-hoaxes/>

<https://indscicov.in/qnacovid/>

<https://indscicov.in/tag/ask-a-scientist/>

Daily Life and COVID - 19

<https://indscicov.in/popularization-resources/>

Mental Health and Discrimination

<https://indscicov.in/mental-health-of-the-elderly/>

<https://indscicov.in/mental-health-of-children/>

<https://indscicov.in/covid-19-and-societal-issues/>

Modelling

<https://indscicov.in/online-symposium-modelling/>

<https://indscicov.in/indscisim>

<https://indscicov.in/explaining-models/>

**ISRC YouTube Channel**

[https://www.youtube.com/channel/UCiBKoITAvx1\\_aZq1oeGcZhw](https://www.youtube.com/channel/UCiBKoITAvx1_aZq1oeGcZhw)

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