

## **UQ-IITD ACADEMY OF RESEARCH SEMINAR SERIES**

Nurturing Minds Through Progressive Research: Unveiling the Future

## Child respiratory health burden associated with long term NO<sub>2</sub> exposure in India

Abstract: Nitrogen dioxide is associated with adverse respiratory health outcomes globally. This study aims to develop a national-scale NO<sub>2</sub> exposure dataset using land use regression modeling and to assess the burden of acute respiratory infections (ARI) among children <5 age (CU5) attributable to NO<sub>2</sub> in India. We used the NFHS-4 survey, which was conducted from 2015 to 2016. Further. we analyzed cross-sectional associations between annual exposures to NO2 and ARI in CU5 using a multivariate logistic regression model. We found for every 10  $\mu$ g/m<sup>3</sup> increase in NO2, the odds of having ARI have increased by 1.26 times (1.19-1.34). These outcomes indicate that India needs specific NO<sub>2</sub> emission reduction policies, just like NCAP for PM2.5.

Venue: LHC 212, IIT Delhi Or you can join online (Microsoft Teams): https://shorturl.at/jksP8

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Speaker : Ms. Neha Singh UQ-IITD Joint PhD student

## **Supervisors**

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> 22<sup>nd</sup> December 2023 10:30 – 11:30 AM IST 3:00 – 4:00 PM AEST



