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SERIES 83
Dr. Tarini Shankar Ghosh

Series – 83

Date & Time : 2023-04-20 (15:00 JST | 11:30 IST)

Venue : [Zoom](#)

Speaker : Dr. Tarini Shankar Ghosh

Affiliation : Department of Computational Biology,
Indraprastha Institute of Information Technology Delhi, India



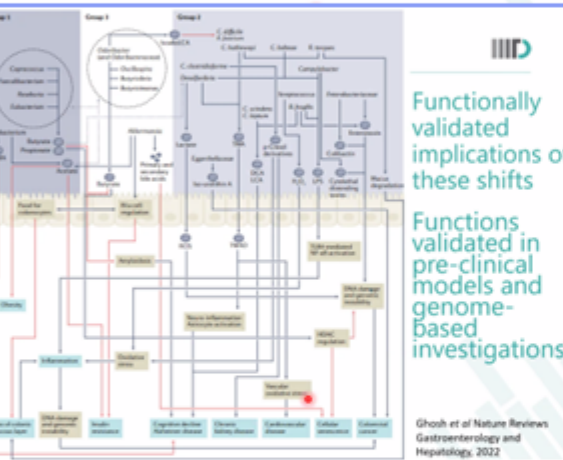
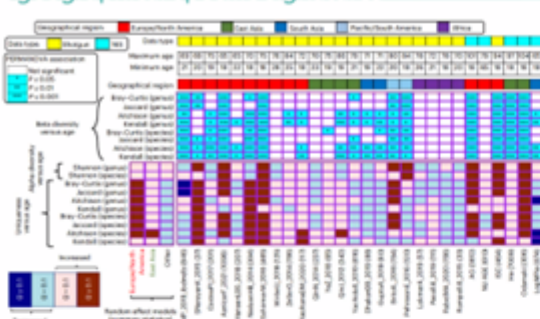
Title- Data-driven informatics exploring the association of the gut microbiome with chronological and biological aging

Alterations in the gut microbiome have been associated with many aspects of human physiology, several multifactorial non-communicable diseases as well as with the treatment responses of individuals to different therapeutic interventions. Biological Ageing is one such aspect of host physiology having one of the strongest associations with the composition of the gut microbiome. Some of these alterations include a progressive decline in multiple bodily functions and an onset of low-grade inflammation (referred to as 'Inflammaging'). But even in healthy people, the gut microbiome alters with age.

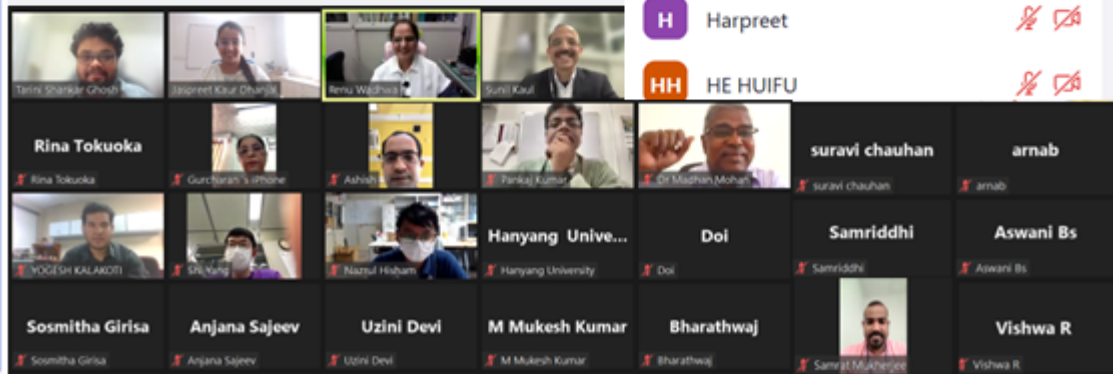
Consequently, several questions with respect to our understanding of the microbiome hallmarks associated with biological aging? Are age-associated gut microbiome alterations a cause or a mere consequence of a declining state of human health or do they indicate a transition to an even more vicious cycle of deterioration in host physiology? Can these alterations in a host be 'reset' using microbiome-targeted therapeutics to delay the transition to an unhealthy aging trajectory?

This talk will review some of the recent genomic and metagenomic studies (including some of my previous works) that have attempted to answer these questions. This talk will also describe certain examples where in the gut microbiome was observed to be a key transducer of the beneficial signals of diet on health of older people. The talk will end with a brief summary of the implications for ageing-microbiome for future, including the prospects of devising microbiome-targeted diagnostic/therapeutic strategies specifically customized for specific societies.

Gut microbiome alterations show geographical specific signatures



**THANK YOU FOR
YOUR PARTICIPATION!**



Participants (33)

Find a participant

- Jaspreet Kaur Dhanjal (Host, me)
- TS Tarini Shankar Ghosh
- RW Renu Wadhwa (Co-host)
- AS Anjana Sajeev
- A arnab
- AB Aswani
- B Bharathwaj
- DP Debashis Panda
- D Doi
- DM Dr Madhan Mohan
- GK Gurcharan Kaur
- HU Hanyang University
- H Harpreet
- HH HE HUIFU

> 33 participants