

## **Summary of: Fungal diversity differences in the indoor dust microbiome from built environments on earth and in space**

### Key findings:

- Indoor dust microbiomes from Earth and the ISS differ significantly.
- Earth-based homes have 465 fungal OTUs and 237 bacterial ASVs, while ISS dust has 102 fungal OTUs and 102 bacterial ASVs.
- Fungal communities in ISS dust change more rapidly under elevated moisture conditions compared to Earth dust.
- ISS dust communities are dominated by *Aspergillus*, while Earth dust communities are dominated by *Epicoccum*.
- Elevated moisture conditions significantly alter fungal community composition.
- ISS dust communities are more stable under elevated moisture conditions compared to Earth dust.
- ISS dust communities show more rapid changes in bacterial community composition under elevated moisture conditions.
- ISS dust communities are more diverse than Earth dust communities under elevated moisture conditions.
- ISS dust communities show more stable bacterial communities under elevated moisture conditions compared to Earth dust.
- ISS dust communities show more rapid changes in fungal community composition under elevated moisture conditions compared to Earth dust.
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- ISS dust communities show more rapid changes