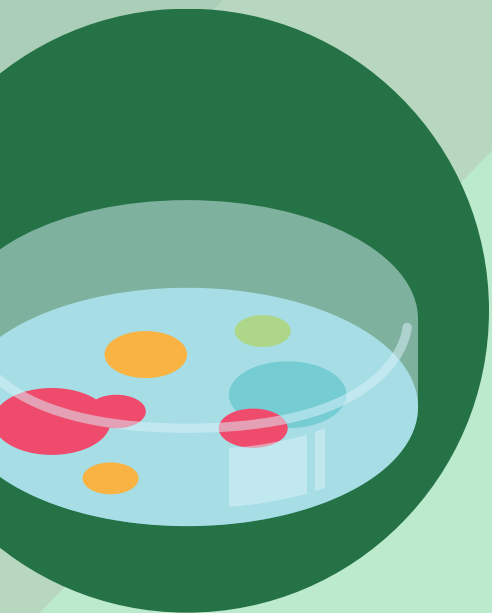


Urban Greenspace and Microbes



What was done?

Petri-dishes were set up in 3 different parkland areas at 4 different heights to capture microbial life. The petri dishes were analysed to identify the species present and their abundance.

What was found?

Bacterial diversity and abundance increased the closer you are to the ground and to trees. A mix of beneficial and harmful bacteria were recorded.



What does this mean?

The initial findings demonstrate that areas with plants and soil are sources of bacteria present in the air, with the greatest numbers and species being in the soil or in the air just above the soil⁽¹⁾.

What is the importance?

Scientists believe that it is of upmost importance for children to play in nature in order for their immune systems to be properly 'trained' by the bacteria present in planted environments, and that urban areas need to incorporate more green space to better our health⁽²⁾.



References

(1) Robinson, J.M., Cando-Dumancela, C., Liddicoat, C., Weinstein, P., Cameron, R. and Breed, M.F., 2020. Vertical stratification in urban greener spaces. *Environmental Health Perspectives*, 128(11), p.117008.

(2) Robinson, J.M., Cando-Dumancela, C., Antwis, R.E., Cameron, R., Liddicoat, C., Poudel, R., Weinstein, P. and Breed, M.F., 2021. Exposure to green space depends upon vertical stratification and vegetation complexity. *Scientific Reports*, 11(1), p.9516.