

Oral bacteria may help forensic scientists estimate time since death

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Accurately determining the time since death is an important aspect of forensic sciences and casework. New research indicates that this might be achieved by examining changes in the bacterial communities of the mouth that occur after death.

Three donated individuals (one male and two females) were studied, and oral swab samples were taken daily throughout the different stages of decomposition. The three cadavers showed similar overall successional changes in bacterial taxa as the bodies decomposed.

"Microorganisms coexist with us during life, playing an important role in both health and disease. Upon death and as the decomposition process advances, <u>bacterial communities</u> change according to the newly set <u>environmental conditions</u>," said Dr. Joe Adserias-Garriga, lead author of the Molecular Oral Microbiology study. "Our aim is to use those changes in the <u>oral microbiome</u> to estimate time since death."

More information: J. Adserias-Garriga et al. Dynamics of the oral microbiota as a tool to estimate time since death, *Molecular Oral Microbiology* (2017). DOI: 10.1111/omi.12191

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