

## Propositions belonging to this thesis:

### Forensic Microbiome:

#### Novel applications of the human microbiome in forensic science

1. The human microbiome holds great promises as an integral part of forensic analysis, especially whenever other approaches show limitations. [*This thesis*].
2. The human microbiome has proven to be a highly accurate biomarker for the body site of origin classification of forensic traces. [*This thesis*].
3. DNA profiling of human bacteria can serve as a method for estimating stains time since deposition in the forensic scenario. [*This thesis*].
4. Combining human microbiome data and machine learning can unlock the prediction of novel traits, such as smoking habits. [*This thesis*].
5. Data imbalance is a common issue in real-life applications which can be overcome by applying appropriate data augmentation techniques. [*This thesis*].
6. Recent advances in DNA sequencing technology have allowed the collection of high-dimensional biological data on an unprecedented scale.
7. If you don't like bacteria, you are in the wrong planet. [*Stewart Brand*].
8. A healthy body is not easily infected by external bacteria and viruses, a healthy mind too is not easily infected by external insults and undesirable events. [*Awdhesh Singh*].
9. Beneath our superficial differences we are all of us walking communities of bacteria. [*Lynn Margulis*].
10. Nothing in life is to be feared, it is only to be understood. [*Marie Curie*].
11. The most important thing I learned is that a Scientist can look just like me. [*Mykel Sisk*].