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Zurich^{UZH}

Institute of Evolutionary Medicine

Evolution of the Microbiome

Molecular insights from ancient samples

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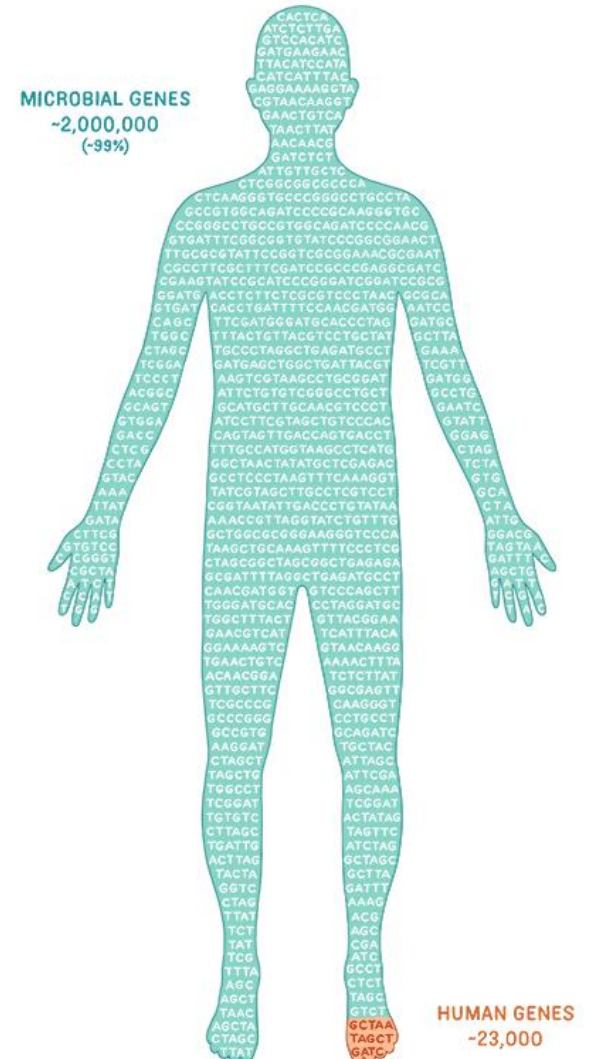
Frank J. Rühli,
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Christina Warinner



What is the human Microbiome?

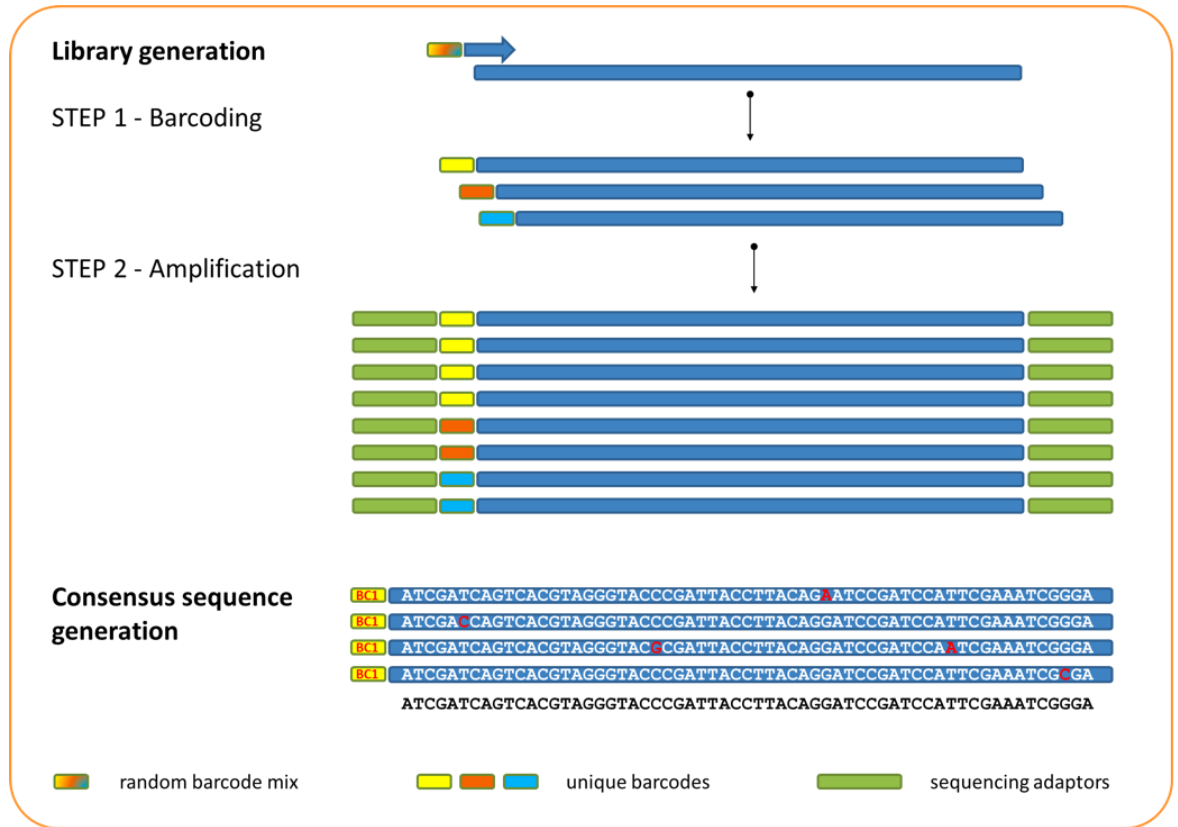
- Microbiome





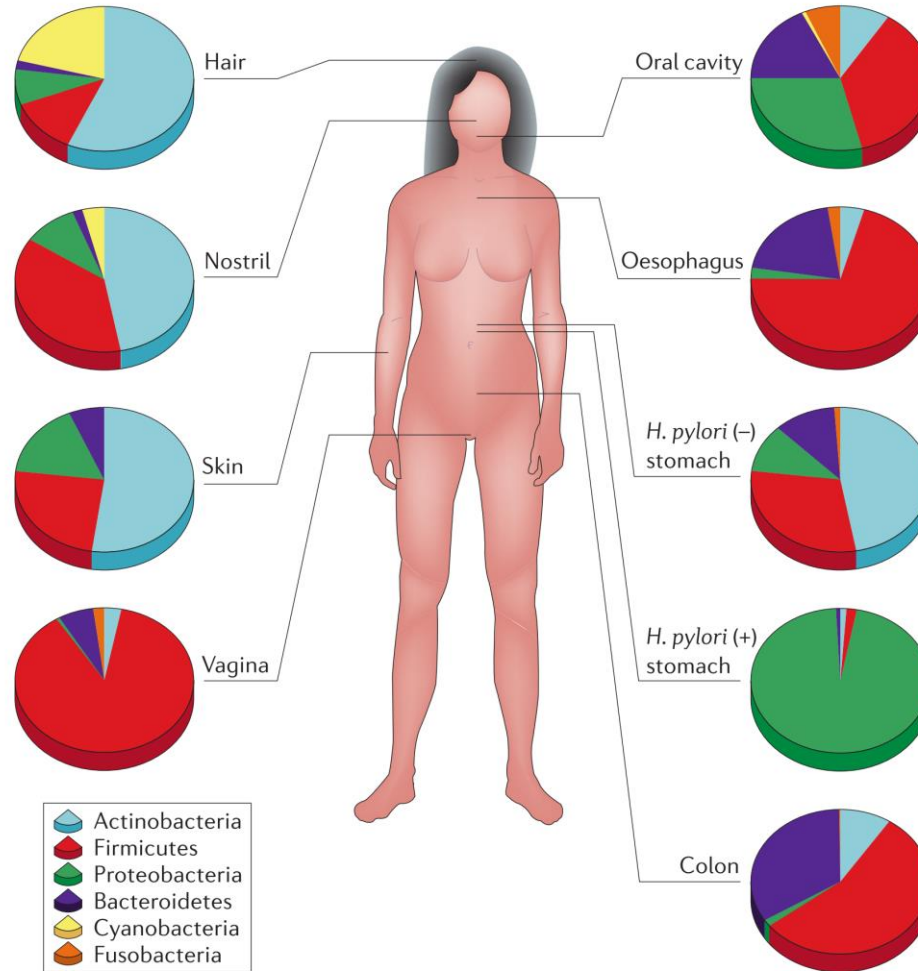
What is the human Microbiome?

- Microbiome
- Metagenomics



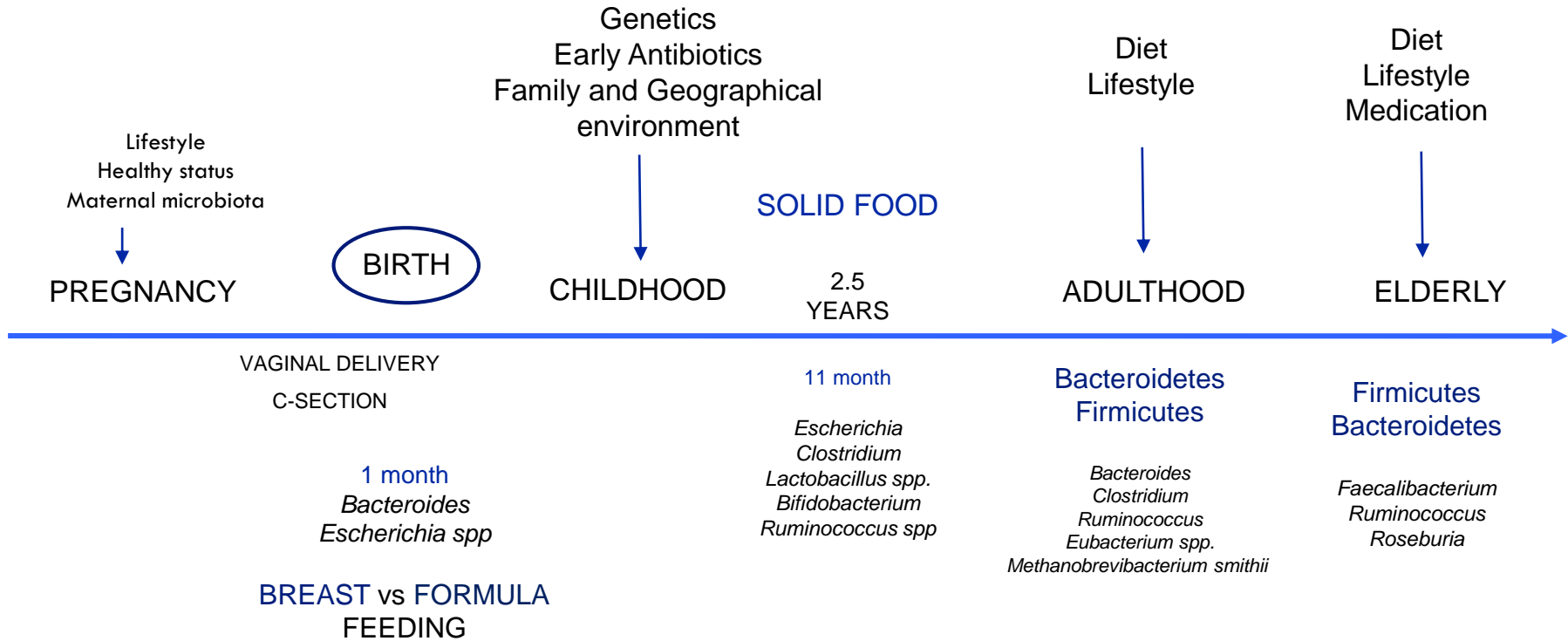


Where is the human Microbiome?





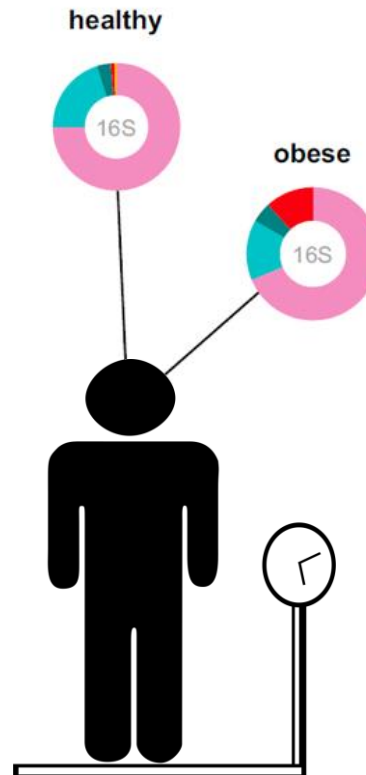
When is it developed?





Health & Microbes

- Protection
- Nervous system
- Stress
- Nutrition





Health & Microbes

- Protection
- Nervous system
- Stress
- Nutrition
- Antibiotics
- Inflammatory Bowel Disease
- Cancer
- CV disease
- Liver disease
- Immune disease

...and more



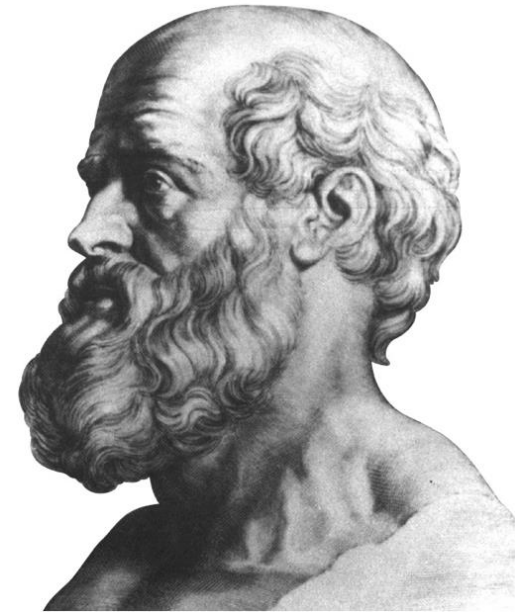


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ALL DISEASE BEGINS IN THE GUT

Hippocrates





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How has the Microbiome been shaped across time?



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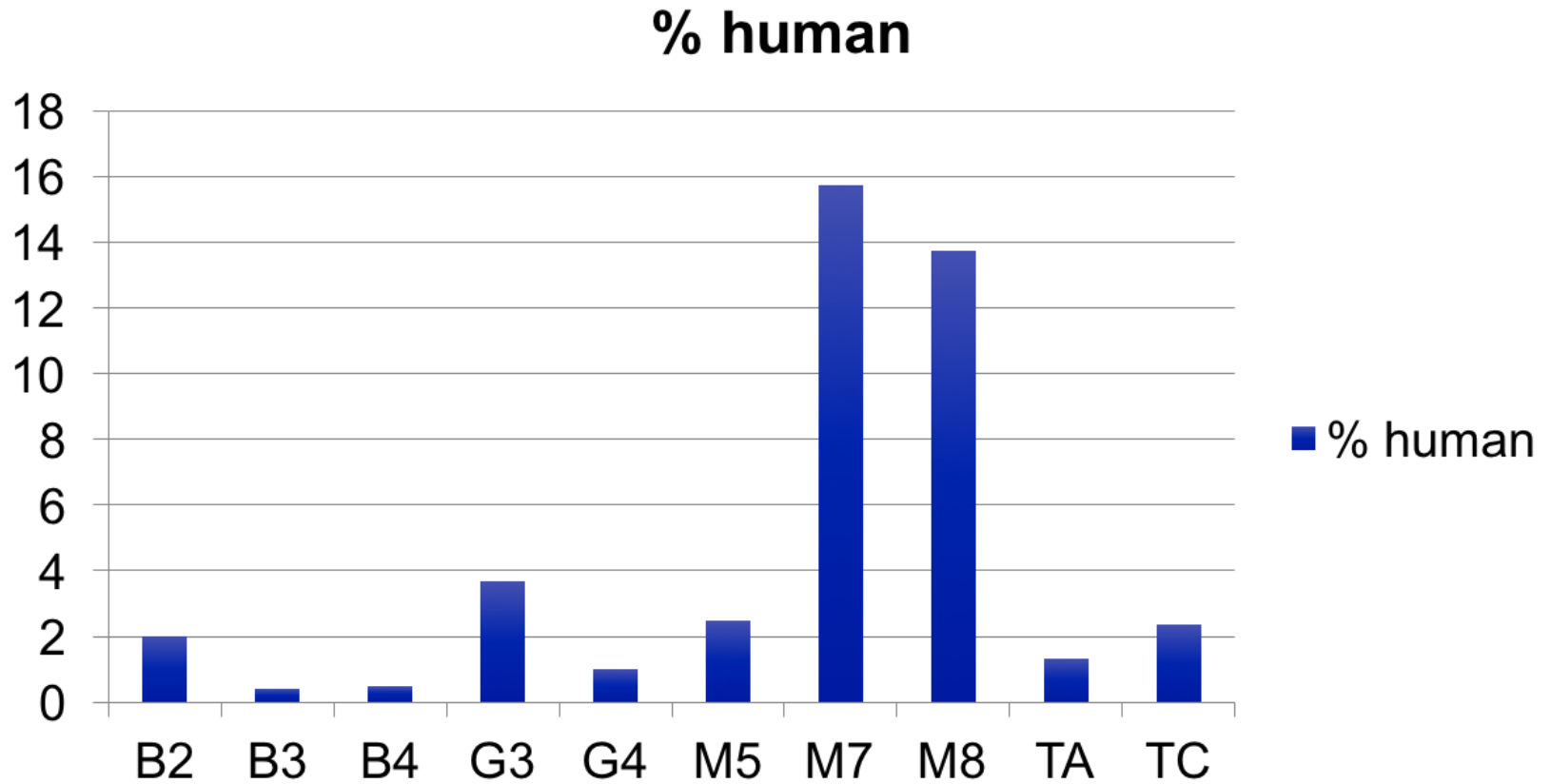
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Ancient Microbiome



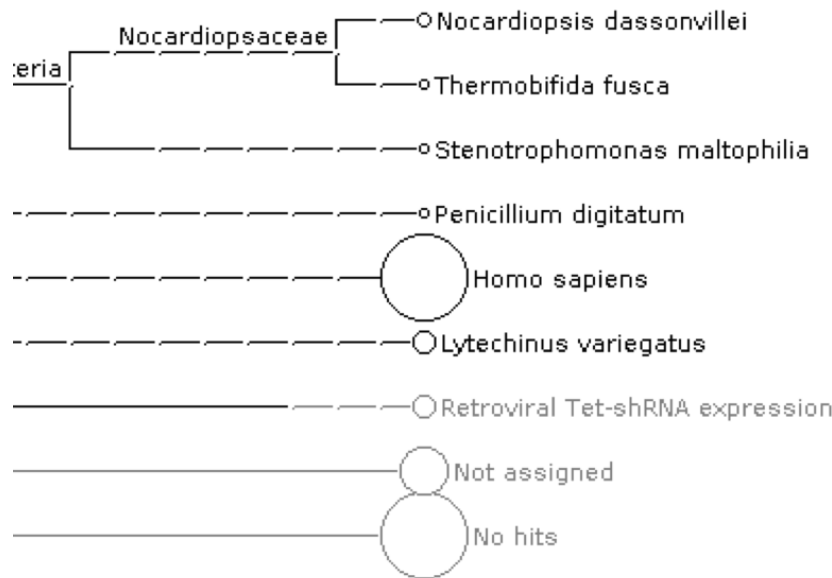


NGS

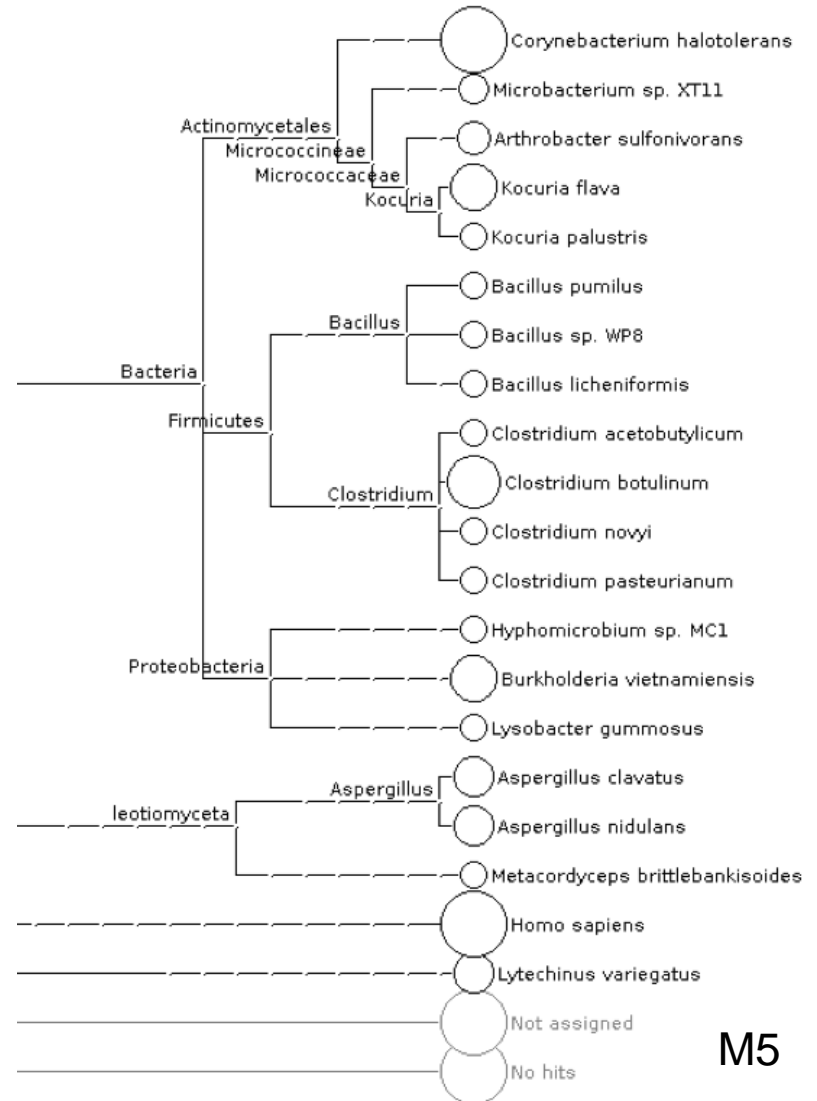




MEGAN Profile



M7



M5



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Acknowledgements

- Funded by SNSF
- PhD position (starting March 2017)
funded by URPP
- Pilot study funding
 - Cogito Foundation
 - Athenaeum Foundation
 - Maxi Foundation

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