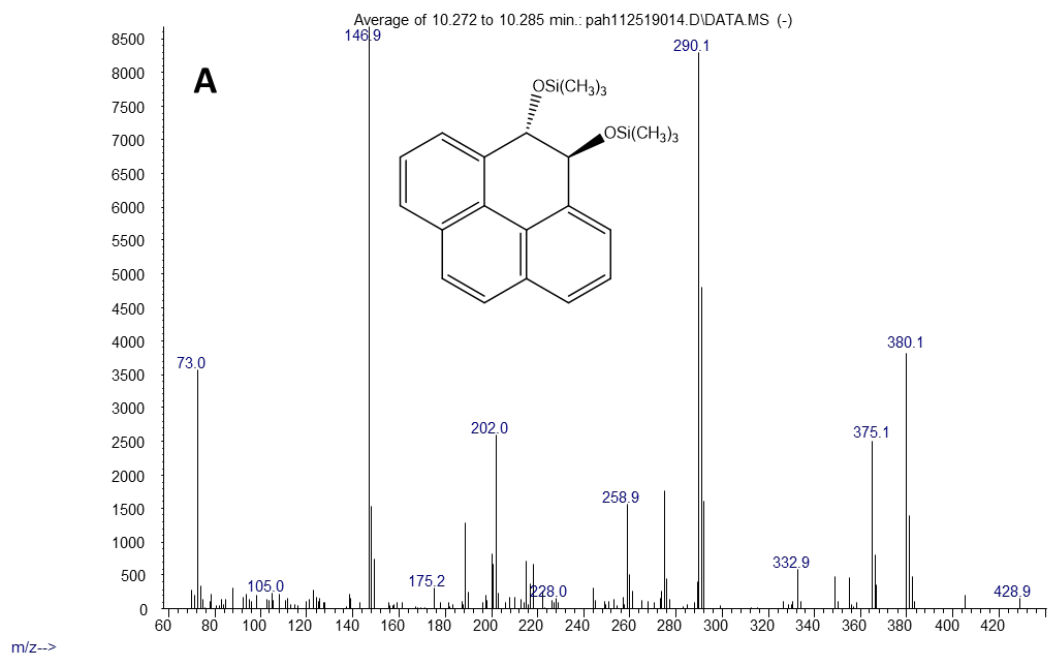


## Supplemental Data

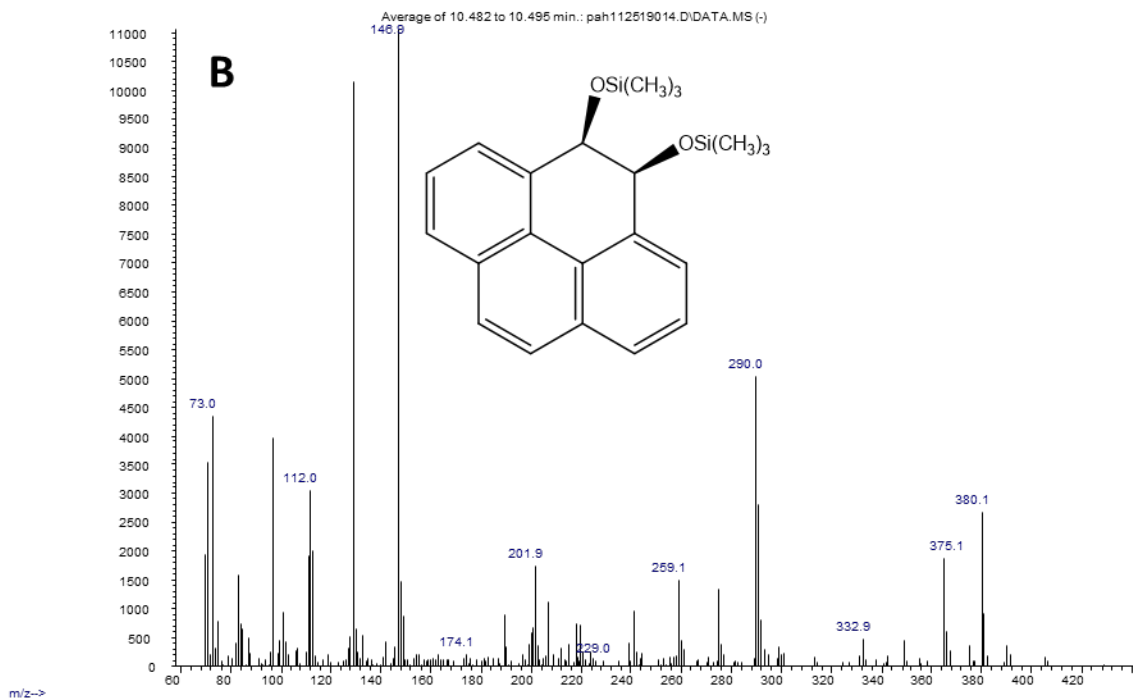
Enrichment of polycyclic aromatic hydrocarbon metabolizing microorganisms in tobacco smokers' mouths

Lin Tao, M. Paul Chiarelli, Sylvia I. Pavlova, Antonia Kolokythas, Joel L. Schwartz, James V. DeFrancesco, Benjamin Salameh, Stefan J. Green, Guy R. Adami

Abundance

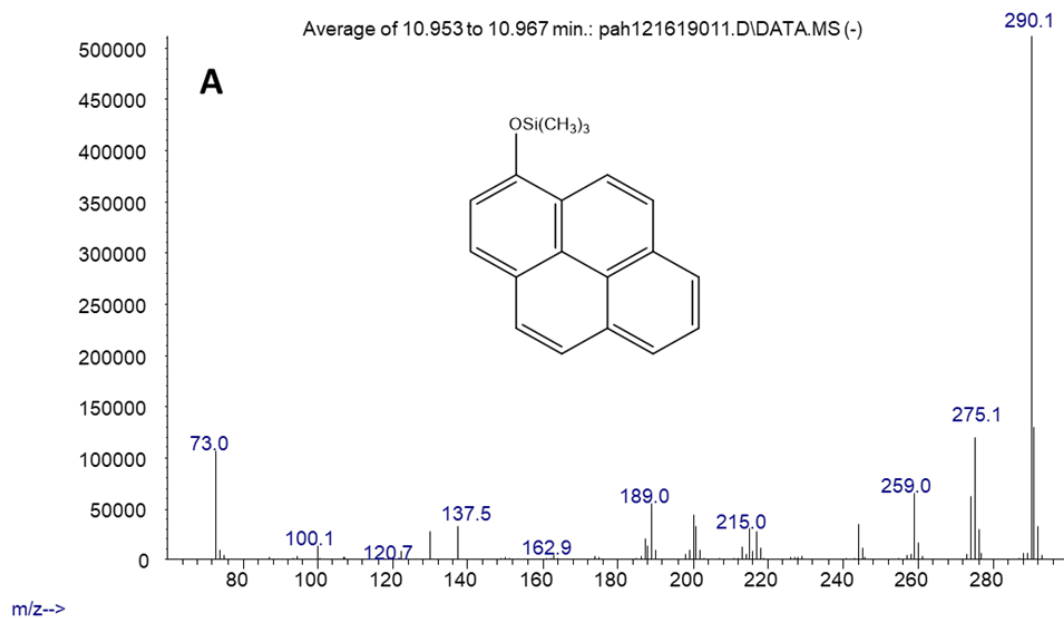


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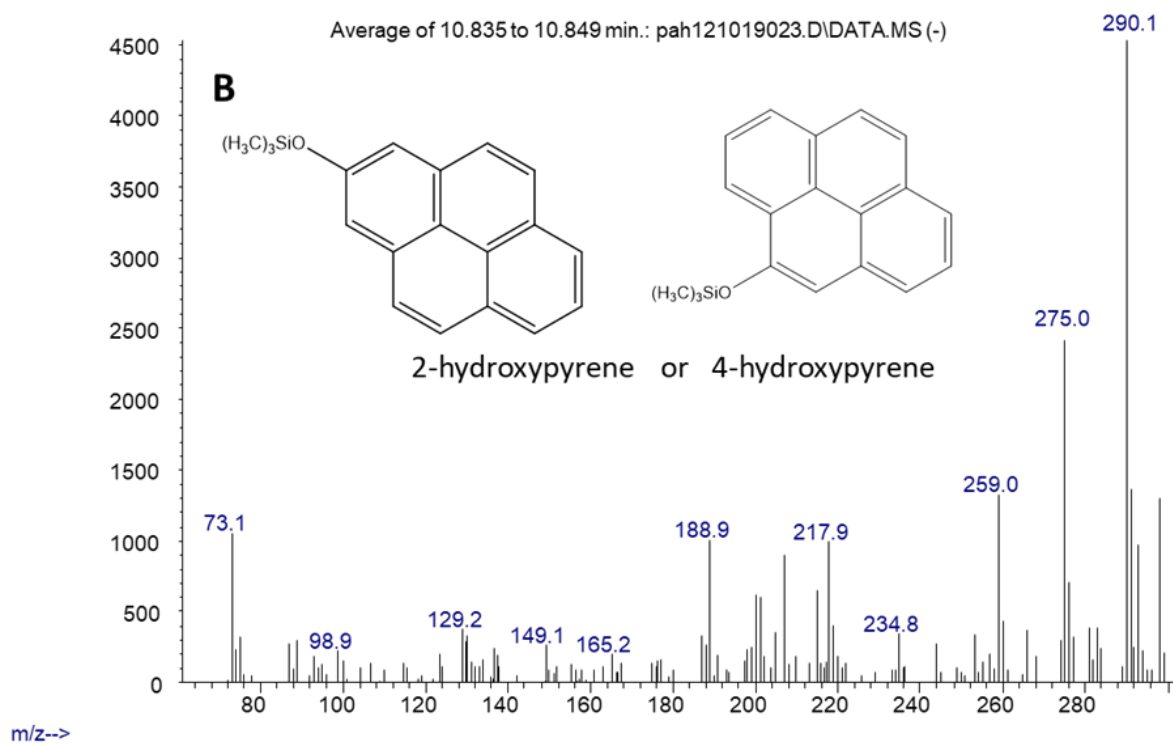


**Supplemental Figure 1:** Electron ionization mass spectra of compounds suggested to be **A)** cis- and **B)** trans-4,5-dihydroxy-4,5-dihydropyrene from incubation of positive control *Mycobacterium rutilum* with pyrene

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**Supplemental Figure 2:** Electron ionization mass spectra of silylated **A)** 1-hydroxypyrene and **B)** a hydroxy pyrene metabolite isolated from a pyrene mycobacterium incubation.

## Supplement table 2

### PAH metabolizing ability in known strains

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Oral microorganism	PAH metabolism	Soil or tobacco leaf	Human commensal
<i>C. albicans</i> ,	-	-	+
<i>Acinetobacter junii</i> ,	+	+	-
<i>Acinetobacter baumannii</i> ,	+	+	-
<i>Agrobacterium tumerfaciens</i> ,	+	+	-
<i>Actinomyces</i> ,	?	+	+
<i>Bacillus pumillus</i> ,	+	+	-
<i>Bacillus subtilis</i> ,	+	+	-
<i>Kocuria rhizophila</i> ,	+	+	+
<i>Rhodococcus</i> ,	+	+	+
<i>Staphylococcus epidermidis</i> ,	+	+	+
<i>Staphylococcus</i>	+	+	+
<i>Micrococcus Luteus</i>	+	+	+
<i>Kingella</i>	?	-	+

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