

**Supplementary Information S3 (table)** | MG-RAST accession numbers for the metagenomes in Figures 2 and 3.

<b>Shotgun Metagenome</b>	<b>MG-RAST id</b>
<b>Gulf of Maine</b>	4441579.3
<b>Indian Ocean</b>	4441155.3
<b>Fjord-Norway</b>	4440275.3
<b>Michigan Agricultural Soil</b>	Schmidt lab
<b>Puerto Rican Rain Forest</b>	4446153.3
<b>Michigan Deciduous Forest Soil</b>	Schmidt Lab
<b>Acid Mine Drainage</b>	4441138.3
<b>Medium Salinity Saltern</b>	4440435.3
<b>Low Salinity Saltern</b>	4440437.3
<b>Salton Sea Sediment</b>	4440329.3
<b>Chicken cecum</b>	4440285.3
<b>Squirrel feces</b>	4461378.3
<b>Chimpanzee feces</b>	4461353.3
<b>Human feces (n=7)</b>	4440452.7
	4440616.3
	4440826.3
	4440639.3
	4440824.3
	4440595.4
	4440614.3
<b>Human mouth</b>	4447943.3
<b>Cow rumen</b>	4441681.3
<b>Michigan Early Successional Soil</b>	Schmidt Lab
<b>Michigan Successional Forest Soil</b>	Schmidt Lab