Fluorescence *in situ* hybridization (FISH) analysis of bacteria and archaea in chemostat.

Authors established a chemostat cultivation method for a mesophilic methanogenic consortium degrading long-chain fatty acids. Left panel shows a phase-contrast image of microorganisms in chemostat. Right panel shows bacteria (red) and archaea (green) visualized by FISH using archaeal- and bacterial-domain-specific probes. Authors detected the following major groups of methanogen within the archaeal community: the aceticlastic genera *Methanosaeta* and *Methanosarcina* and the hydrogenotrophic genus *Methanospirillum*.

Related article: Shigematsu, T., Tang, Y., Mizuno, Y., Kawaguchi, H., Morimura, S., and Kida, K., "**Microbial diversity of mesophilic methanogenic consortium that can degrade long-chain fatty acids in chemostat cultivation**", **J. Biosci. Bioeng., vol. 102, 535-544 (2006)**.