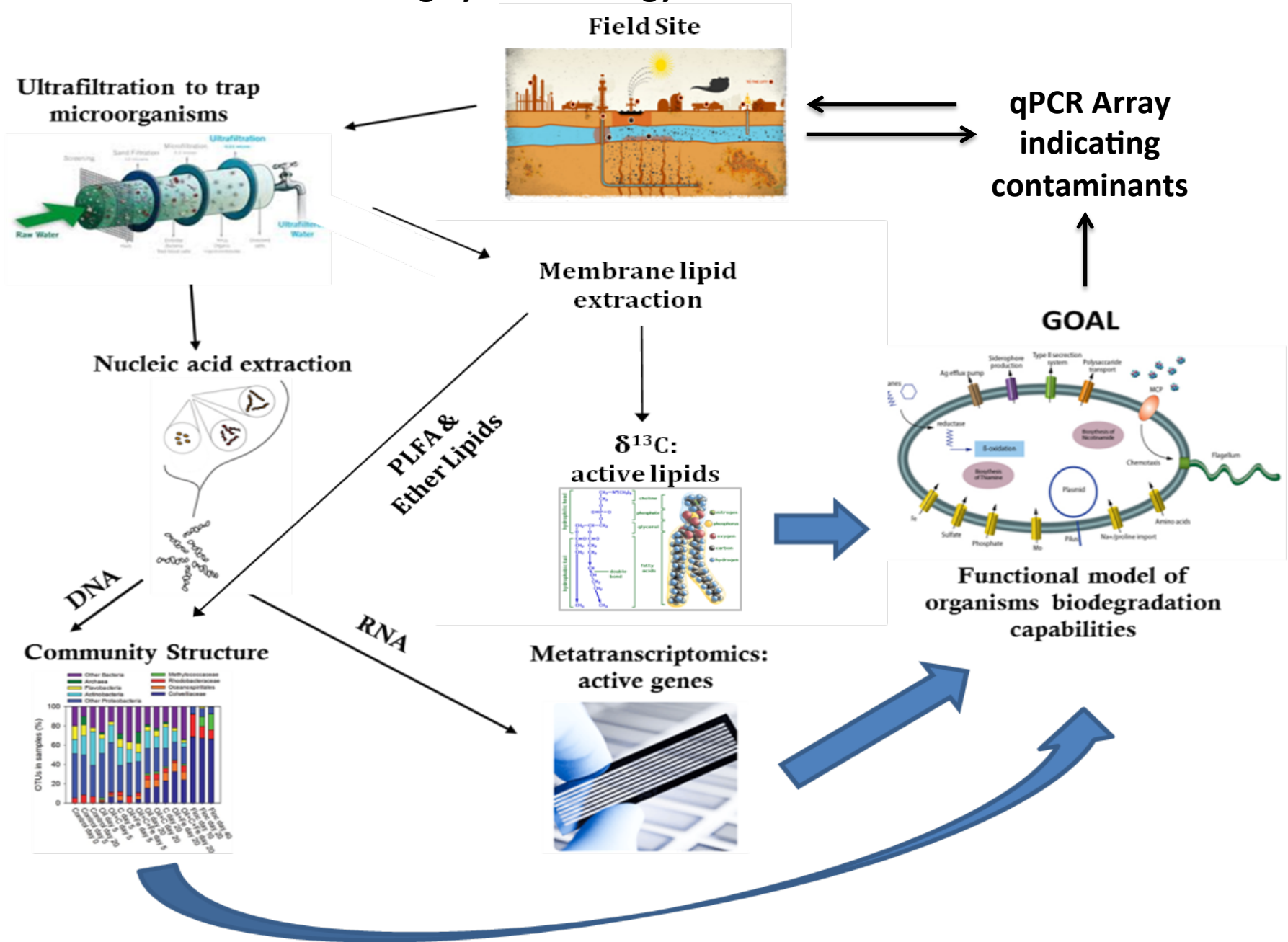
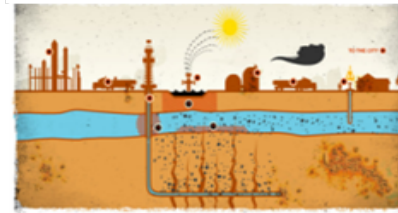


Fracking Systems Biology for Forensic Tools

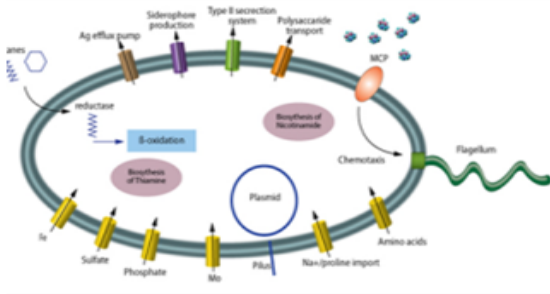


Field Site



qPCR Array indicating contaminants

GOAL



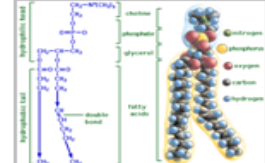
Functional model of organisms biodegradation capabilities

Nucleic acid extraction



Membrane lipid extraction

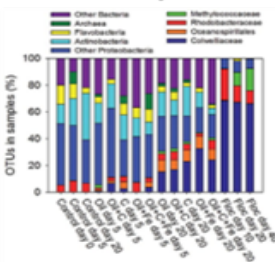
$\delta^{13}\text{C}$: active lipids



PLFA & Ether Lipids

DNA

Community Structure



RNA

Metatranscriptomics: active genes

