## Interpretation of microbial food webs from metagenomic data in deep-sea hydrothermal vents across the Arctic Mid-Ocean Ridge

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### Funding for this project was provided by the K.G. Jebsen Centre for Deep Sea Research

## **Study Motivation**

% 16S rRNA reads

Energy availability from different redox reactions varies considerably between and within the studied hydrothermal vent fields due to variations in geological and chemical setting. Do the same primary producers occupy available niches or do different organisms fill these roles within Arctic Mid-Ocean Ridge hydrothermal food webs?

# Hydrothermal Vent Sites 40°W O° O° Loki's Castle 70°N Soria Mioria Fåvne Norway

Methane Oxidizers, Aerobic

## **Key Findings**

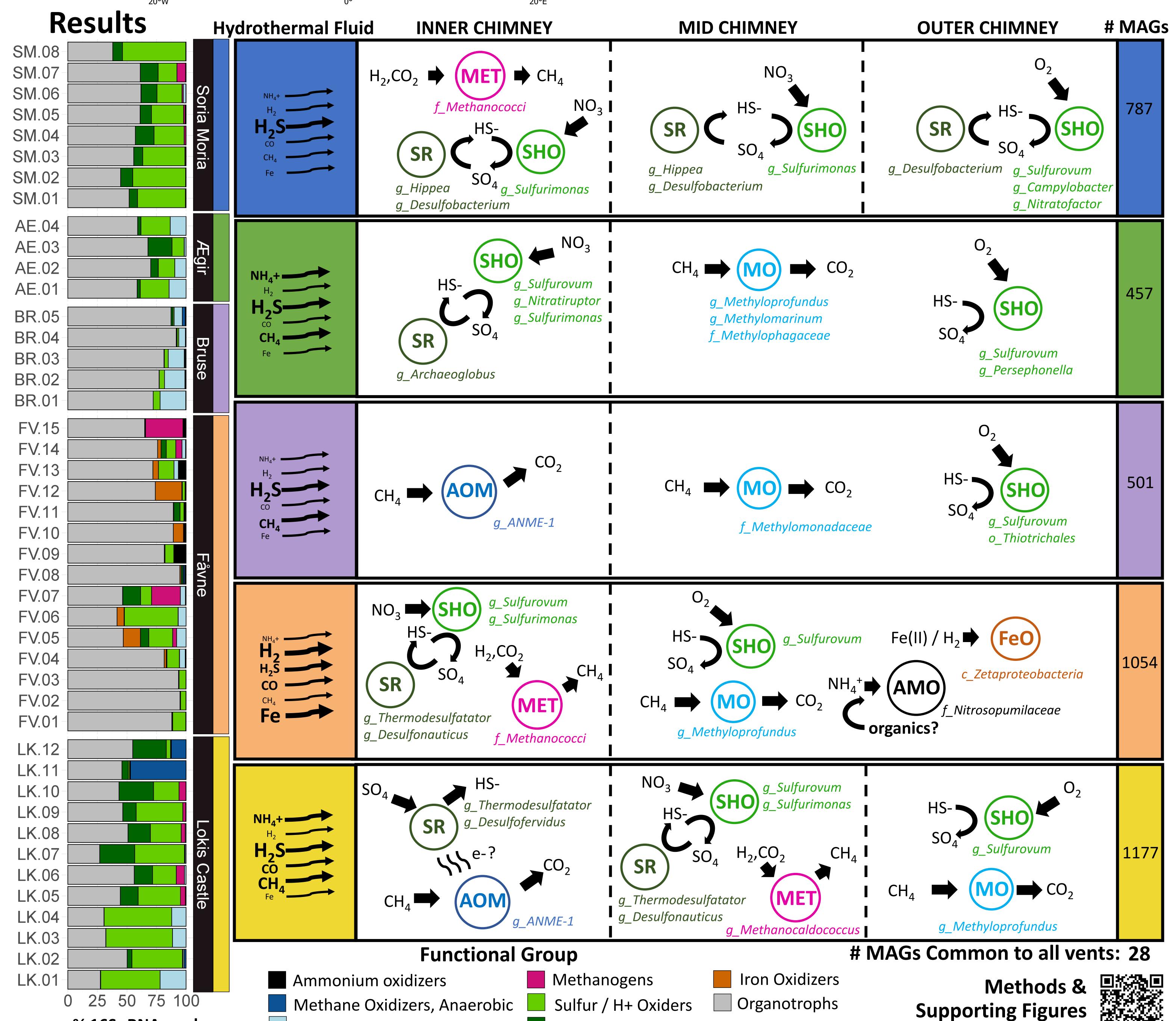
- Food webs are different between sites
- Food webs are shaped by energy landscapes
- Few genomes are ubiquitous

## **Next Steps**

 Comparative genomics between highly-related metagenome-assembled genomes (MAGs)

github.com/eolesin

 Investigate CRISPR spacers to describe viral predator diversity



Sulfur Reducers