



ACCRETION ICE OF LAKE VOSTOK

TRAVON HERRIOTTE, SCOTT O. ROGERS
BIOLOGICAL SCIENCES, BOWLING GREEN STATE UNIVERSITY



PURPOSE

The purpose of this project is to show that there are some viable microorganisms embedded in the accretion ice in Lake Vostok of Antarctica.

METHODS

1. MAKE NUTRIENT MEDIA PLATES
2. INOCULATE THE PLATES WITH MELTED ICE CORE SAMPLES
3. INCUBATE AT 15 DEGREE CELSIUS
4. PERFORM COLONY PCR
5. VISUALIZE THE AMPLIFIED PRODUCTS ON AN AGAROSE GEL BY GEL ELECTROPHORESIS
6. PURIFY THE PCR PRODUCTS
7. SEQUENCING
8. BLAST

RESULTS

- TH-2, *Spirosoma sp*
- TH-3, *Spirosoma escalantus*
- TH-4, *Afipia massiliensis*
- TH-5, *Afipia massiliensis*
- TH-7, *Bradyrhizobium elkanii*
- TH-8, *Afipia birgiae*
- TH-9, Uncultured *Afipia sp*
- TH-10, Uncultured alpha proteobacterium
- TH-11, *Candidatus Reyranelia massiliensis*
- TH-13, Iron-reducing bacterium
- TH-16, *Sphingomonas sp*
- TH-17, *Erythro bacterlitoralis*
- TH-18, *Methylobacterium fujiwaraense*
- TH-19, *Dothideomycetes sp.*

