The International Research Experience in the permafrost microbiology is a multidisciplinary summer course in Pushchino, Russia, that explores permanently frozen sediments (up to 2-3 million years old) collected from the Kolyma lowland in northeast Siberia. These samples expand our understanding of life at low temperature, as well as the survivability and adaptation of microorganisms to harsh permafrost conditions.

Participants will get a hands-on learning experience in cutting-edge microbiological and geobiological techniques including molecular biology, bioinformatics, geochemistry and work with Russian research groups to solve real research questions.

Travel expenses and a small stipend will be provided.

Projects include:
- Enrichment, isolation and partial characterization of dominant microorganisms.
- Characterization of the microbial community by DNA analyses, and fluorescence microscopy.
- Geochemical analyses of permafrost samples.

The 2017 course is open to undergraduate students of junior or sophomore standing

For more information and on-line application, please visit: http://micro.utk.edu/ires/index.php

or contact Permafrost Microbiology Course Coordinators, Tatiana Vishnivetskaya, at tvishniv@utk.edu or +1 615 887-4736
Karen Lloyd, at klloyd@utk.edu or +1 865 974 3441

https://www.youtube.com/watch?v=kDVWgLeWRPA
https://www.youtube.com/watch?v=sEUgFKeRWoodz=3x