LANDSCAPE PAINTINGS (WINTER)   (SUMMER)
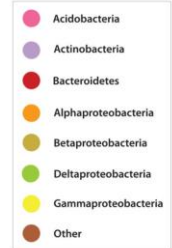
DATA PAINTINGS (WINTER)   (SUMMER)

DECODING THE DATA PAINTINGS
MICROBIAL POPULATIONS IN THE SNOW
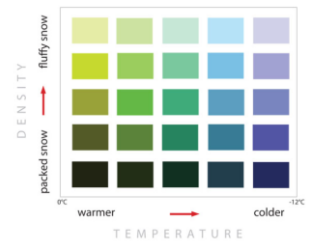Each dot per square inch represents 5480 bacterial cells per cubic centimeter of snow. Microbial diversity is indicated by the color of the dots, as follows:

- Acidobacteria
- Actinobacteria
- Bacteroidetes
- Alphaproteobacteria
- Betaproteobacteria
- Deltaproteobacteria
- Gammaproteobacteria
- Other

DECODING THE DATA PAINTINGS
Each of the data paintings was created with the following parameters in mind. Lake, Mountain Birch Forest, Transitional Zone, and Alpine used data collected in Winter 2016. Transitional-Alpine Summer used data collected in early Summer 2016.

Snow **temperature** and **density** are represented by **color** and **value**.

SOUP N' SCIENCE

UTILIZING ART TO PRESENT SCIENCE DATA

KIM REASOR – VISUAL ARTIST
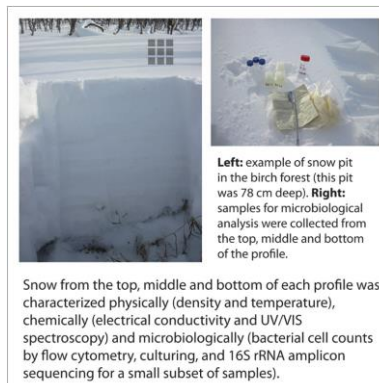### DAVID LIPSON – ARCTIC MICROBIOLOGIST

UIC Science is excited to host Kim Reasor, a professional visual artist who specializes in oil paintings and art-science collaborations, and Dr David Lipson, an Arctic microbiologist from the San Diego State University who has collaborated with Kim to utilize art to present scientific data. Please join us for soup as Kim and David share their own experiences and we talk as a group about other potential art and science collaborations in Utqiagvik.

Example of process:

Let's have some homemade smoked moose soup and talk about creative ways to utilize art to present scientific data!

Time: 12 (noon) Thursday, Oct. 17, 2019
Place: BARC Large Conference room (Barrow Arctic Research Center is located on the NARL campus).

Questions or Comments? Contact:
kaare.erickson@uiccs.com
Cell #: (907-297-8633)

LAKE - Snow Depth 40cm.   TRANSITIONAL - Snow Depth 160cm

Final paintings all 24" x 18"

40cm = 4.5" on painting
160 cm
18" on painting
ICE
water

ALPINE - Snow Depth 80cm   BIRCH FOREST - Snow Depth 80cm

80cm = 9" on painting
80cm = 9" on painting

(Red areas indicate where I added data visualization layers to the grayscale copies of the landscape paintings)

Left: example of snow pit in the birch forest (this pit was 78 cm deep). **Right:** samples for microbiological analysis were collected from the top, middle and bottom of the profile.

Snow from the top, middle and bottom of each profile was characterized physically (density and temperature), chemically (electrical conductivity and UV/VIS spectroscopy) and microbiologically (bacterial cell counts by flow cytometry, culturing, and 16S rRNA amplicon sequencing for a small subset of samples).

MICROBIAL POPULATIONS IN THE SNOW

Each dot per square inch ☐ represents 5480 bacterial cells per cubic centimeter of snow.

Image courtesy of Kim Reasor, see more at kimreasor.com