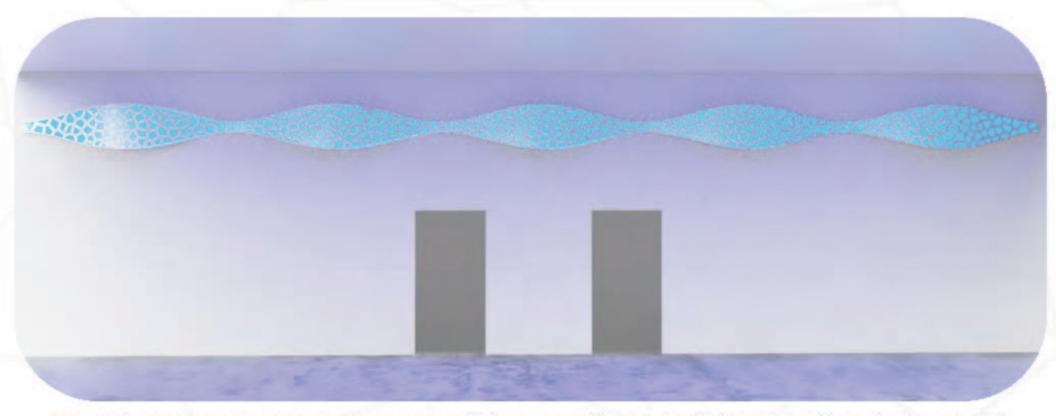
Ilya Pieper

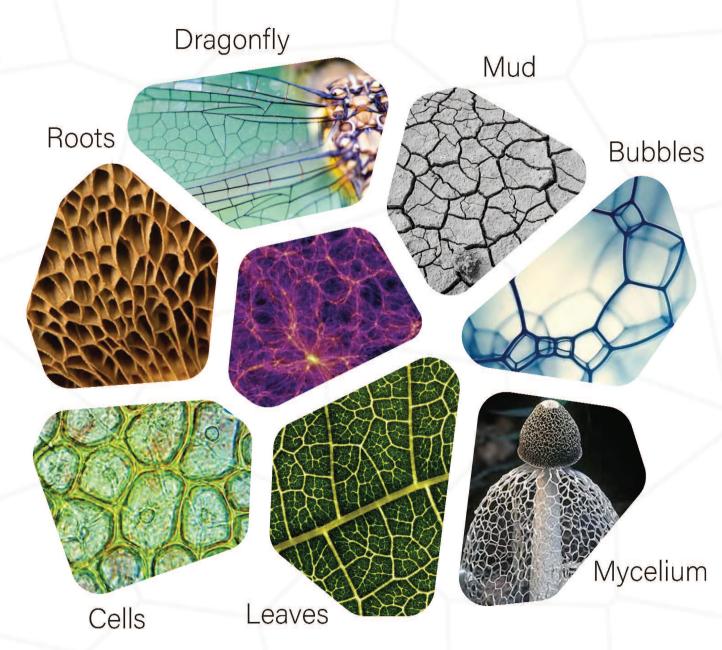
## Cosmic Murmur



Cosmic Murmur represents one of the prominent building blocks of our world, the Voronoi pattern. This mathematical pattern is seen throughout our known universe. This piece explores the relationship between our internal structure and this essential building block of nature.

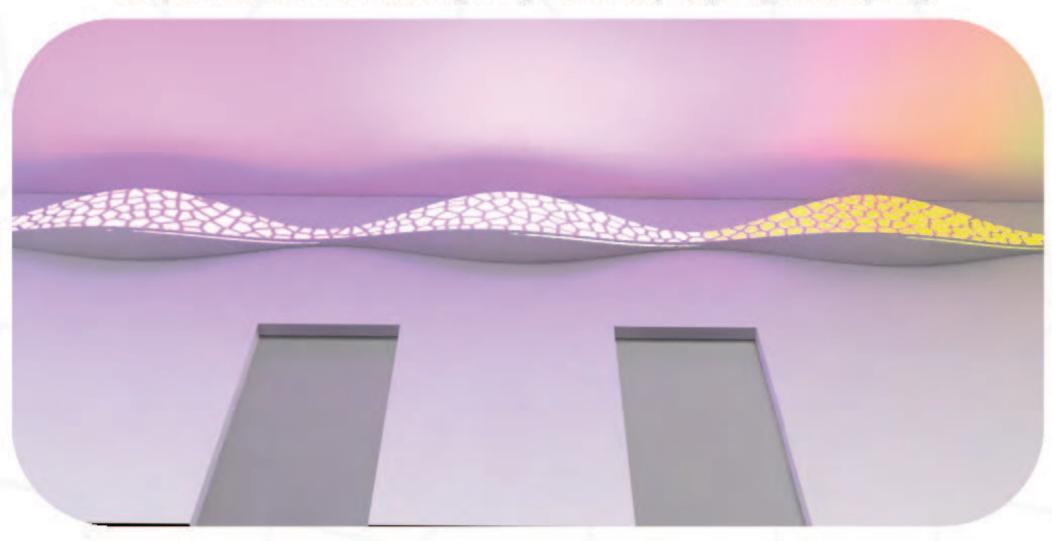
Ilya Pieper

From the wings of a dragonfly, to the patterns of mycelium growth; the structure of the cells within each human being, to rock formations and drying mud; Voronoi scales them all. It's seen throughout human development in the structure of our civilizations. It is utilized to assess emergency routes for vehicles and planes, as well as mapping out cities and neighborhoods. Beginning with the most nascent stages of our fetal development we are all formed around this structural pattern.

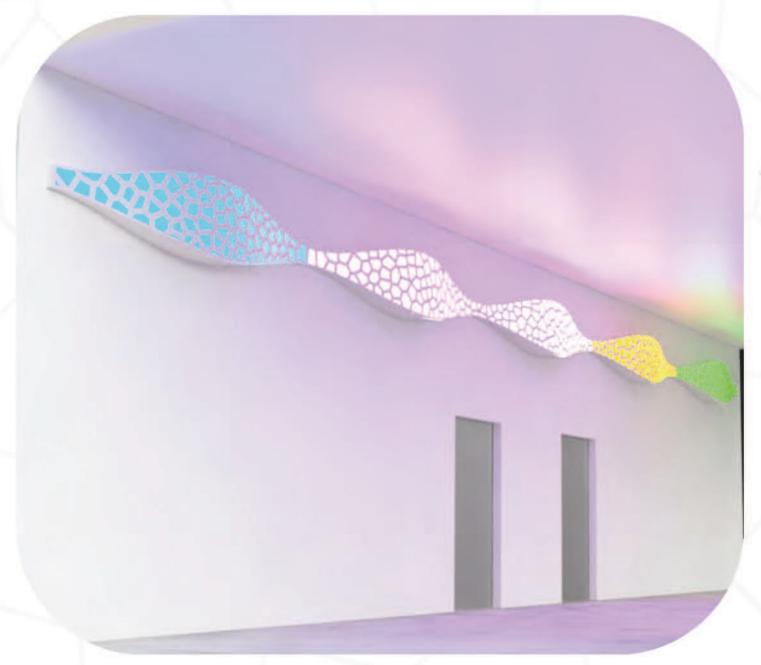


Ilya Pieper

The shape of Cosmic Murmur resembles a wavelength. Just like an ever present low amplitude frequency, this pattern is a quiet force running through our universe, weaving our very existence. The voronoi pattern traverses the scale of the micro and macro, riding the troughs and crests of a continuing rolling wave through anything and everything.



Ilya Pieper



While this piece is a static representation, internal lighting will breathe life into it. Utilizing individually addressable LEDs behind the Voronoi, I look to bring motion into this piece while letting colors highlight the diversity this pattern represents in nature: green for leaves, oranges for dirt and stones, blues for bubbles, yellows and whites for mycelium, reds for the patterns of our emergency service routes. Changing the brightness of the LEDS across the piece creates a sense of undulation, giving it a feeling of being alive.

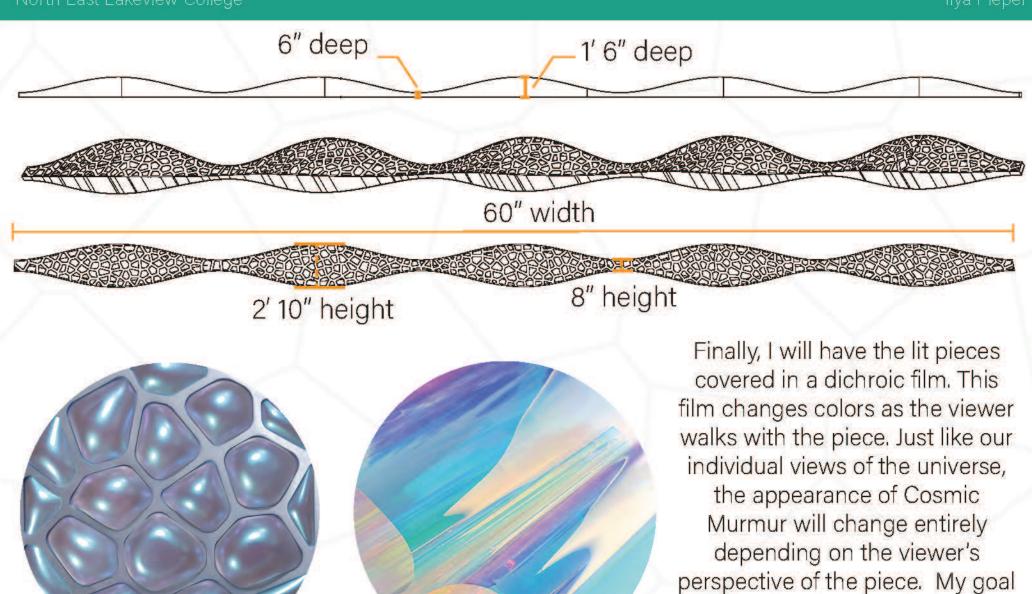
for this piece is to inspire an awe

of nature, and a sense of wonder

at how our world is built.

North East Lakeview College

Ilya Pieper



Ilya Pieper

Materials	Cost		
Aluminum	\$7,000.00		
Acrylic	\$1,200.00		
Dichro Film	\$2,500.00		
Electronics	\$5,000.00		
Hardware	\$300.00		
Totals \$16,00			

Rentals	Cost		
Scissor Lift	\$1,500.00		
Box truck	\$600.00		
Total	\$2,100.00		

Labor	Cost
Artist Fee	\$6,000.00
CNC cutting	\$3,000.00
Fabrication	\$10,000.00
Electronic Integration	\$5,000.00
Installation	\$2,000.00
Total	\$26,000.00

Materials	Weight Lbs	
Aluminum	155	
Acrylic	60	
Dichro Film	10	
Electronics	50	
Hardware	10	
Total Ibs	285	

## **Total Budget**

Material	Labor	Rentals Total	
\$16,000.00	\$26,000.00	\$2,100.00	\$44,100.00