## Wyoming nonprofit to distribute art kits to remote areas in Wyoming

By MARY RUCINSKI Aug 11, 2019



Local artist Rene Williams puts together a Science Loves Art kit that will be distributed to remote areas in Wyoming. Williams owns 4th Street Studios and was one of the individuals who initiated Science Loves Art, a local nonprofit organization. MARY RUCINSKI/For the Boomerang



Science Loves Art Program Director Ivy Thompson demonstrates paint pouring Monday at 4th Street Studios. Paint pouring is one of the art projects included in the Science Loves Art kits that will be disbursed to remote places in Laramie. MARY RUCINSKI/For the Boomerang

Science Loves Art, a nonprofit Wyoming organization, will be packing a goal of 700 Science Loves Art kits in the next several weeks. The kits will be sent to remote areas in Wyoming and schools across the state.

The nonprofit was started by local artist Rene Williams and a number of local scientists. Before becoming a nonprofit in January, Science Loves Art was "more of an idea, a concept, rather than an organization with a mission," as Williams described it.

"It's a nonprofit organization whose main goal is to bring science/scientists and art/artists together for the benefit of the community," Williams said.

Program Director Ivy Thompson emphasized collaboration between scientists and artists as a key component of Science Loves Art.

Williams and Thompson want to "provide a place where scientists and artists can come together with ideas, workshops and exhibitions."

## **Grant money**

The National Science Foundation gave a \$20 million grant to the University of Wyoming's Established Program to Stimulate Competitive Research in 2017. Part of the grant went to Williams to create a unique outreach opportunity using art as a communication method for scientists' work.

NSF is looking at new ways to bring science to the public, Williams explained. She and Thompson are contributing to this goal through Science Loves Art.

"We want to think about ways to create opportunities for artists to work with scientists," Williams said.

The purpose of the NSF grant to UW's EPSCoR is to study the microbial array across Wyoming. Microbes are small organisms that perform many functions, such as decomposition and fermentation.

As part of making microbes known, Williams and Thompson, in collaboration with Wyoming artists and scientists, will design art kits with projects inspired by the images and functions of microbes.

The Wyoming Arts Council and City of Laramie also gave grants to support Science Loves Art efforts.

## The purpose of the kits

The Science Loves Art kits will introduce microbes to individuals using the kits as well as promote NSF's goal to find new ways to bring science to the public.

Currently, there are three art kits, one of which involves paint pouring. Williams described paint pouring as very organic — artist cannot control what will happen. The paint moves and reveals shapes that look like microbes in a very abstract way, Williams explained.

"All of our projects are inspired by the shape or function of microbes," she said.

"We view the images of microbes under a microscope for inspiration," Thompson added.

"It's just the visuals of [microbes] that have inspired this," Williams said. "It's just a way for us to begin the conversation about microbes."

One of the places Thompson and Williams already have connections to distribute the kits is the Wind River Indian Reservation. Thompson will visit the reservation near the end of September to make more connections and plans for the kits.

The art kits will include a pamphlet that explains the grant, microbes and the science behind the art project. Effectively, people doing the art kits will get to make something with their hands while learning why the materials in the kit do what they do.

"We approach our projects as art and science through discovery and experience," Williams said.

She explained the questions that arise when doing the project will be answered with science.

"So, it's kind of like STEM outreach, but including art," Thompson said.

"Remote areas are really our concentration and schools that don't have a lot of funding for art," Williams said. "Art teachers and science teachers that want to bring their classrooms together, instead of talking about art and science separately, they can discuss them together."

"It makes it really understandable for anyone," Thompson explained.

She said people ages 5-98 have done the activities.

"We're trying to break that barrier and make things really simple for people to understand, while they're creating it," Thompson said.

Aside from an informational pamphlet, the kits will have all the necessary supplies to do the art project. Williams thought it important to put something in the kits the kids can take home, so there will be reusable art supplies and resources in each kit.

## Science of paint pouring

Paint pouring, one of the kit projects, is a type of art that has recently become very popular, but it was Mexican artist David Alfaro Siqueiros who stumbled across it in the 1930s. Siqueiros was fascinated by the technique, calling it "accidental painting."

Though there are different forms of paint pouring, the one Williams and Thompson are doing starts by putting paint in a small plastic cup. After this, they take a canvas and put it face down on the cup. They then hold the canvas against the cup, then flip it all over, laying the canvas on the table while the cup is flipped. The paint begins to pour out onto the canvas.

Paints have different densities because of their different pigment makeup. In paint pouring, the more dense paints are intentionally poured on the bottom of the cup so that when the paint is flipped onto the canvas, the lighter ones will be on the bottom.

At this point, Rayleigh-Taylor Instability comes into play. RT Instability occurs when two fluids of different densities are put together. When the less dense fluid is on the bottom, it tends to push the denser fluid and rise to the top.

The result of this in paint pouring is a mixture of colors with small circles of paint called "cells" that appear on the surface. These cells are a result of the paint on the bottom, which is less dense, rising to the top.

Another example of RT Instability is when milk is poured into coffee. If done in a clear glass, you will observe the milk forming a plume. The mushroom cloud that nuclear bombs create is also an example of RT Instability in action.

In the paint pouring kits, there will be three paint colors: red, blue and yellow. White is also included. They will include small plastic cups and small canvases for the students to do the project.

The kits will also be available for groups to purchase for private parties. Adults enjoy the projects as well.

"Their support will help supply more kits to schools and community groups," Williams said.

Donations and support for the kits can be made directly to Science Loves Art at www.sciencelovesart.org or by donating through its Facebook page.

Science Loves Art is located at 4th Street Studios, 315 S. Fourth St.

Thompson explained they want to be a catalyst for a scientist-artist environment. "We want scientists and artists to contact us, to create collaborations, even between random people who contact us."

а