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Art Meets Science – and Vice Versa – in Fulginiti Exhibition

By Tyler Smith

Damaged lung. Human expectorant. A bit of brain tumor.

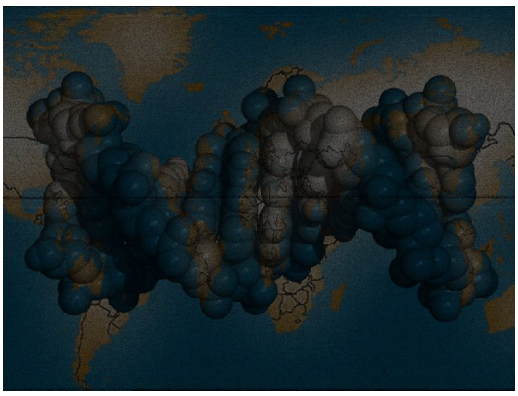
Not obvious objects of art. But a stroll through "Art in Science/Science in Art," the latest exhibition at The Art Gallery at the Fulginiti Pavilion for Bioethics & Humanities on the University of Colorado Anschutz Medical Campus, just might change your mind. In fact, it very well may leave you wondering where one finds the line between science and art – or if there is one.

The exhibit features 30 images created by scientists and artists affiliated with the University of Colorado. Images of another 36 of the 250 or so works submitted for consideration for the show are available online.

John Cohen and Helen Macfarlane of the University of Colorado co-curate the "Art in Science/Science in Art" exhibition now at the Fulginiti Pavilion for Bioethics & Humanities on the Anschutz Medical Campus.

There is a little bit of everything in this arresting show. "Plexiform Pulmonary Artery," for example, presents points and swirls of color that would fit comfortably in an exhibit of abstract expressionism.

"It's a Jackson Pollock in its energy and controlled randomness," said J. John Cohen, MD, PhD, an immunologist with the Barbara Davis Center for Childhood Diabetes. Cohen co-curates the show with Helen Macfarlane, director of educational technology for the CU School of Medicine and a trained medical illustrator.



C DNA

Human Cough

Its painterly qualities aside, "Plexiform" is also a "tour-de-force of pathology," Cohen said. The image, by CU pathologist Carlyne D. Cool, MD, is of a lung section with five different stains exposing red and white blood cells in the lower right-hand corner and nearly filling a circle at the center with color.

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In artistic terms, the circle has abstract beauty. In scientific terms, it shows a pulmonary artery ravaged by disease.

Infared Kiss

Cool's work is one of the exhibit's "happy accidents," the byproduct of a scientist's hard work and attention to detail, Cohen said. "It happened because she went beyond her routine" in staining the lung section, he noted.

Longevity

Plexiform Pulmonary Artery

Tricks of the eye. Most of the pieces reward a second look. Nature lovers will find beauty in Bette K. Kleinschmidt-DeMasters' "Pussy Willow Branches Caught up in a Spring Time Snowstorm," which appears to be precisely what the title suggests with its soft colors set off by the brown of branch-like shapes. In reality, the work is a photomicrograph of a pediatric brain tumor.

For DeMasters, another CU pathologist, the photo of the brain biopsy, stained to reveal the tumor, recalled scenes of her girlhood in Wisconsin, Cohen said. It's that gentle image that the mind clings to on viewing the depiction of a grimmer reality, he added.

"As a viewer, you never question what it really is," he said.

Pussy Willow Branches Caught up in a Sprintime Snowstorm

Just gimme a kiss. Want sex? Try "Infrared Kiss," by Lannie Pihajlic, which actually isn't infrared at all, but rather an image of a kiss photo-shopped to make the point where the lover's lips meet "white hot," in the artist's words.

"It's a take on infrared," Cohen said. "It's tarted up to prove a point."

For elegant execution of concept, there is "C DNA," by Brian Shucker, a computer science student at CU Boulder at the time he created the piece. The work superimposes a picture of a DNA helix over a map of the world. Pixels forming the picture of the DNA are the letters and numbers of the code that, in turn, generates the picture of the DNA. The representation of the DNA thus contains the code that enables it to self-replicate, as a DNA molecule does in nature.

Even a piece that might induce a cringe factor has a strange beauty. "Human Cough," by Meg VanSciver and Jean Hertzberg of

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CU Boulder, depicts just that, the bright green droplets measured and mapped by laser Doppler as they spread through the air.

At the root of each piece, regardless of its origin, is the perception of the individual who conceived and crafted it. "Longevity," by CU medical oncologist Daniel Chan, PhD, is the result of a slide that dried out, leaving crystals formed by magnetic fluid. The jade-colored crystals, Chan notes, form a pattern similar to a Chinese character meaning "Longevity," which he includes in a corner of the piece.

Chan's piece is the result of an experiment gone wrong, then made right when an individual chose to look at it through another lens.

"Things like that happen in art all the time," Macfarlane said. "It becomes a happy accident because you can see the artistry in it."

Another look. The Fulginiti exhibit is actually a revival for "Art in Science," which Cohen and Macfarlane conceived in 2006. A visit to an exhibition with a series of works illustrating the relationship between math and art was an early inspiration. The idea took even stronger hold after they visited "Body Worlds," the traveling exhibition of preserved body parts that blurs the lines between anatomy, disease processes and art.

"We said to each other, 'What is this?'" Cohen recalled. "Is it art? Is it showmanship? Is it education? We became Body Worlds groupies."

They decided to explore the places where art and science may converge by asking scientists for images they considered appropriate for an art show.

They ultimately received 250 submissions. A jury composed of artists and scientists from the faculties of CU, the University of Arizona, Johns Hopkins, and the University of Louisville selected 30 for the exhibit. A $5,000 grant from the University of Colorado President's Fund for the Humanities funded the show, which opened at the Denver Museum of Nature and Science in 2007. It also appeared in galleries around Colorado, in Mexico and in the New York Hall of Science in Queens through 2011.

The works were in storage when Tess Jones, PhD, interim director of the Center for Bioethics and Humanities and director of the Arts and Humanities in Healthcare Program at CU, who had seen the original show, recently urged them to bring the exhibition back for a new audience.

"We were delighted to have one more chance to bring it out of mothballs," Cohen said.

"These are artists' images inspired by scientists who have worked them out visually and have become scientists working as artists," Macfarlane said.

"Art in Science/Science in Art is on display at The Art Gallery at the Fulginiti Pavilion for Bioethics & Humanities through March 27. The gallery is free and open Monday through Friday from 9 a.m. to 5 p.m. View images of the works online at http://artsci.ucdenver.edu.