Thar's gold (& magic) in them holograms

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REALITYCHECK

The Museum of Holography, 1134 W. Washington Blvd., is open Wednesday through Sunday, 12:30 - 5 p.m. Admission, $3. 312-226-1007

THE MINER crouches down at the edge of the creek, his pan raised and ready to dip into the stream. He does not move until you arrive and step into his 3-D field of play. As you sway right, the pan dips into the water in its ever-zealous quest for gold. You stop, and he stops. Shift back to the left and his pan is lifted into the air. How fast he moves and how many times he moves all depends you. The person standing next to you can control the same image at the same time – in his own rhythm. That is the magic and fun of holograms.

The Museum of Holography in Chicago features a myriad of pieces – some political, some medical, some amusing. Along with the miner, there is a collage of huge tarantulas so lifelike you can count the individual hairs on their large creepy legs. Another piece features a donation box with a hand that reaches out toward you, and there's also a hologram of Michael Jordan doing his gravity-defying moves.

In addition to the main gallery, there is a small room that displays medical holograms.

"They are often used as teaching aids," says Loren Billings, executive director of the museum. "Unlike a flat X-ray on a light board, holograms give you a full sense of what is going on in the body."

Holograms are all about particle physics. Break a hologram and the complete image is in each and every bit. Though it seems like magic, sound science can explain it.

"A hologram is basically a bunch of waves printed on a light-sensitive material," Billings says. "A tree, a leaf, your body – it's full of waves. Everything in nature is encoded by wave patterns, and those waves move through the unified field in wave patterns.'

The museum is more than a showplace, it is also a teaching institute. At the School of Holography students learn holographic art and science.

Billings was inspired to create the museum some 25 years ago when she met physicist David Wender of Libertyville, who was among the first to work with holograms and lasers. Today the museum houses the most extensive collection of holograms in the world, as well as a gift shop featuring framed works and watches and brochures with 3-D images.