

VISUAL ARTS

# Weaving together artistry, science

*Tang's Radical Fiber offers take on neglected craft*

By Tresca Weinstein

Like most work done primarily by women, fiber arts—objects made with textiles, for decoration as well as everyday use—has a long history of not being taken seriously.

“In the early 20th century, painting was considered one of the highest forms of art and was traditionally male dominated, and that gender disparity goes back centuries,” said Rebecca McNamara, associate curator at Skidmore College’s Tang Teaching Museum. “The crocheting, knitting, and sewing that girls were taught and women were expected to do was considered functional and sometimes frivolous. It wasn’t until the 1970s that we saw quilts hanging on the walls of major museums.”

With the exhibition “Radical Fiber:

Threads Connecting Art and Science,” McNamara has assembled a collection of work that not only displays the range and beauty of this medium, but also illuminates its essential contributions to the fields of engineering, medicine, tech and mathematics. The

show runs through June 12 at the museum, which reopened to the public on Feb. 3.

For McNamara, the seed of the show was the question, How can art change science? She was particularly inspired by the work of artist Dario Robleto, which recreates the pulse waves of the human heart, and by Cornell mathematician Daina Taimina, who used fiber to create a model of hyperbolic space—a feat previously considered impossible.

“She knew it would be a struggle for young people to learn, so she wanted to

**If you go**

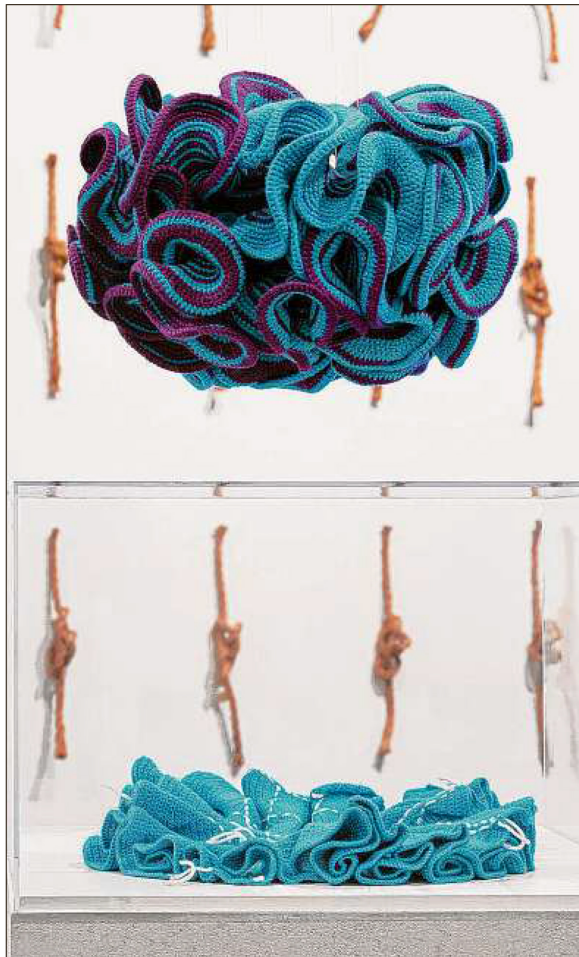
**"Radical Fiber: Threads Connecting Art and Science"**

■ **Where:** 815 North Broadway, Saratoga Springs

■ **When:** Thursdays, 12–9 p.m.; Friday through Sunday, 12–5 p.m.

■ **Tickets:** Free, with suggested donation

■ **Info:** 518-580-8080 or <https://tang.skidmore.edu>



Installation view of “Radical Fiber: Threads Connecting Art and Science,” at the Tang Teaching Museum at Skidmore College through June 12.

Art Evans



A volunteer at the Tang Teaching Museum stitches a crochet coral to a structure to create the Saratoga Springs Satellite Reef, part of the worldwide Crochet Coral Reef project.

Megan Mumford

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physically manifest it,” the curator explained. “When she mapped it out on paper, she realized she could actually crochet the pattern. She illustrated that this historically undervalued medium can transform how we think about the world.”

As McNamara delved deeper into these intersections—with the support of faculty from Skidmore’s biology, neuroscience, mathematics and statistics, computer science and art departments—she uncovered multiple instances of fiber arts’ impact on both conceptual theories and real-world applications.

The show is organized around the themes she saw emerging, including machines, the brain, the body and community.

“It brings together makers of all varieties—traditional artists, hobby crafters, model makers, designers, engineers, researchers, a psychologist—lots of different types of people and thus many different types of objects,” McNamara said. “I hope visitors will see every object on view as



Soft Monitor

Detail of Soft Monitor (Victoria Manganiello and Julian Goldman), computer 1.0, 2018, hollow polymer tubing, natural fiber thread, liquid, operating system.

simultaneously fine art, technically skilled craft and scientific tool.”

A complex weaving by Leah Cook represents the fibers of her brain, as shown in an MRI scan. Work by Anna Dumitriu uses a fabric dye called mauveine, accidentally invented in 1856 using chemistry that led to the evolution of the modern pharmaceutical industry. Veronica Dry’s tactile pieces were developed specifically for the blind

and visually impaired, as a counterpoint to the increasingly smooth, slick surfaces of today’s technology.

“Radical Fiber” also features a collectively created piece called “Saratoga Springs Satellite Reef,” part of the worldwide Crochet Coral Reef project conceived by Christine and Margaret Wertheim. The large-scale works — there are more than 50 around the world — assemble multiple cro-

cheted “corals” made using a code of stitches informed by Taimina’s work in non-Euclidean geometry. Motivated by the decimation of the Great Barrier Reef in Queensland, Australia, where the Wertheim sisters grew up, the project brings awareness to climate change as well as the overlap between art and science.

Beginning in early 2021, McNamara began hosting online workshops and craft circles for the public, in-



Megan Mumford

Collections Registrar Kara Jeffs stitches a crochet coral to a structure at the Tang Teaching Museum at Skidmore College to create the Saratoga Springs Satellite Reef.

inviting people to come and crochet the coral forms together. To ensure there were no financial barriers to participation, the Tang distributed hundreds of crochet hooks and balls of yarn in the community and beyond.

“For people who hadn’t crocheted before, it offered the freedom to learn the craft without fear of messing up, because both corals and art are inherently imperfect,” the curator explained. “For many of those who had been crocheting for decades, it was the first time they were empowered to see themselves as artists. We’re valuing every single contribution as a fine artwork, and bringing all these

unique, individual voices into one big community voice.”

In more than two years of shepherding “Radical Fiber” from idea to fruition, McNamara says, she’s learned countless things about how the world functions—from why we can thank the first synthetic dye for many modern medicines to how weaving technology is involved in the computer software that sent spaceships to the moon.

“The world is infinitely more complex and interconnected than we can ever imagine,” she said, “and there are so many stories hidden within it that are still to be revealed.”