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In the path of Leonardo da Vinci: Where art and science collide

'Pulse: Art and Medicine,' on view through April 13 at the Mansion at Strathmore

By Claudia Rousseau, On View

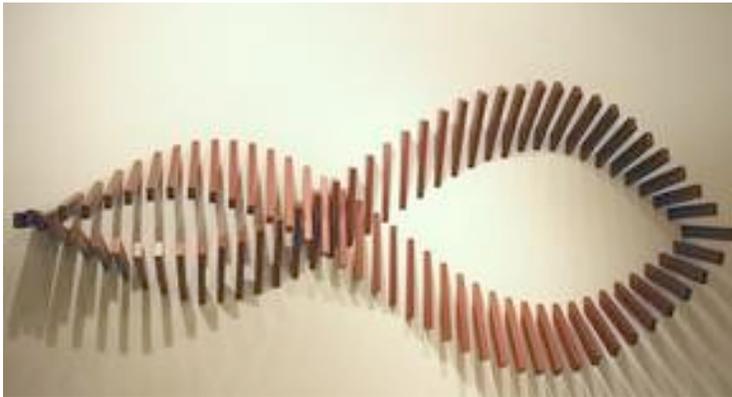
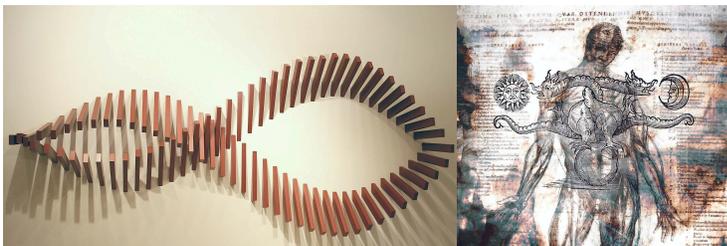


Photo From Bruce Peebles
"Double Helix," a 13-foot sculpture by Bruce Peebles, is part of the "Pulse" exhibit about medicine as inspiration for art at the Mansion at Strathmore in North Bethesda through April 13.



Coming into the Mansion at Strathmore these days the visitor hears celestial music floating down from above. The sounds are part of “Pulse: Art and Medicine,” a fascinating and inspired exhibit now on view in the galleries. Organized and curated by Harriet Lesser, the exhibit comprises the work of nine artists working in varied ways with the theme, and a selection of sixteen medical illustrations made by graduates of the Johns Hopkins University Department of Art As Applied to Medicine and loaned from their recent centennial exhibition. While the latter show how medical illustration merges the worlds of art and science, the exhibit as a whole puts a light on that place where visual art and medical science intersect.

The variety here is both extensive and intriguing. There is a painfully realistic carbon dust rendering of a cancer of the pharynx (Max Bröedel, 1921), a diagram of the pathway of the bullet that killed President McKinley (Duncan Winter, 1956), an exquisite graphite drawing of a hip bone that you’d swear was a photograph (Michael Silver, 2011), and other works in an array of media that, as stated by Dr. Gary Lees, the current director of the Johns Hopkins program, depend on a “strong foundation of scientific knowledge, artistic technique and clear visual communication.” Indeed, these works are remarkable not only for their technique, but for the way that they reveal and teach. Good examples would be the print of the delicate water color of kidney and bladder stones by Ranice Crosby (1924) — if you didn’t know that’s what they are, they look like gemstones or wood — or the image of a synapse rendered in colored pencil, Cinema 4D and Photoshop by Graham Johnson in 2004 that looks like a scene from a sci-fi movie.

Then there is the work of the other nine artists exhibited side by side with the scientific illustrations. Probably most impressive are the two constructions by sculptor Bruce Peebles made in collaboration with sound designer, composer and engineer Jim Corrigan. “Travelogus One” and “Rondo Celestial” each entail a large walnut box topped by an opaque glass. As the machinery inside produces musical sounds, the vibrations cause sand inside the glass to organize into symmetrical patterns that bring to mind the plans of sacred sites of antiquity and healing ceremonies of various cultures. Drawn from the science of cymatics, each of these sound sculptures is unique, but depends on the inherent geometry that results from sound vibration. Even more remarkable is the fact that in creating these works, the artists have used those same frequencies and tones that modern medicine is rediscovering have been used to promote healing in the body. The auditory, physical and visual experience of these works is transformative, providing a calming ambience for viewing the exhibit.

Among the other artists represented here, the drawings of Laura Ferguson are among the most striking. Ferguson is currently the artist-in-residence at the NYU School of Medicine where she draws from bones and cadaver dissections in the Anatomy Lab, as well as working with radiology images in 3D Imaging. Her drawings recall the delicacy and passion of Leonardo, as well as his fascination with the body’s visual complexity, its inherent beauty, and its connection to the processes and patterns of nature. Her drawings, like “Dark Twisting Figure” and “Watery Blue-Red Figure” are often layered with a density that draws the viewer and keeps him looking. Grounded in science, her work is imbued with a spirit that can be compared to the great Renaissance master.

In 1995 Virgil Wong was studying human anatomy at the University of Rome Medical School while simultaneously learning Renaissance painting techniques at Rhode Island School of Design's European Honors Program there. He was also intrigued by the visual language of alchemy, with its strange symbols and hidden meanings. These interests intersect in his large work titled "Alchemy." Printed on specially coated large aluminum sheets in 2011, the work brings together scanned sketches done after Vesalius' text on anatomy, alchemical imagery, and other materials into a strange mixture that results in a powerful image. "Corporeal Landscape," made from manipulated copies of the artist's charcoal drawings of the body on a vast hardened paper support has a similarly strong visual impact.

The work of Jessica Beels flourishes in an upstairs gallery dedicated entirely to her. The artist's flax paper constructions on wire armatures have been primarily small scale, while the space allowed her to create exciting large works that suspend from the ceiling for this show. Beels' fascination with biology and the mysterious mathematical beauty of biomorphic shapes leads her to create artistic versions of things as diverse as a model of the HPV virus, a clothesline of brain cells in synapse ("Pass it On"), and a strongly emotive piece about the spine and osteoporosis ("Daily Dose"). These works express her current interests in the concepts of destruction and regeneration in nature, and the basic geometry revealed in organic structure as it deteriorates or grows. In this she also echoes interests of Leonardo, and there's something about her work that is reminiscent of his drawings and models concerning comparative anatomy and other pattern analogies in nature.

We may not expect such beauty to extend to viruses and bacteria but, as Luke Jerram shows all too clearly, the opposite is true. His amazing clear glass replicas of the swine flu or HIV viruses show us the fact that the same patterns that engage us in a flower or a snowflake are evident in these structures as well. His photographs of the glass sculptures are almost equally attractive, as are the photos by Ron Farina of his exquisite glass biospheres in which glass bees swarm around glass flowers in a kind of suspended animation.

Three-dimensional medical visualization through techniques like CT and MRI scans are explored in the work of Dr. Kai Hung Fung. Dr. Fung's work is displayed on a computer screen with 3-D glasses available to watch the colored scans in motion. On a smaller and more intimate scale are Laura Ferguson's prints drawn from details of similar scans made of her own body beautifully isolated in delicate frames.

To April 13 at the Mansion at Strathmore, 5301 Tuckerman Lane, North Bethesda. Gallery hours are 10 a.m. to 4 p.m. Monday, Tuesday, Thursday and Friday; 10 a.m. to 9 p.m. Wednesday and 10 a.m. to 3 p.m. Saturday. For information, call 301-581-5109. Visit www.strathmore.org.