ART
INSTITVTE
CHICAGO

THE LABCOAT VISIT

Working in close collaboration, the museum's curators, conservators, and conservation scientists often put a scientific spin on art, combining cutting-edge technologies and art historical knowledge to uncover artworks' secrets. Delight in some of their discoveries in this revelatory trip through the collection.

GALLERY 205

Virgin and Child with Young Saint John the Baptist, Saint Cecilia, and Angels (c. 1505) by Piero di Cosimo

Artists sometimes make dramatic compositional changes in the midst of painting their pictures. These changes, whether large or small, are referred to with the Italian word *pentimenti*. X-rays of this painting by Piero di Cosimo reveal numerous pentimenti. Originally the work depicted only the Virgin and Christ Child set inside a rocky grotto with a landscape visible in the distance. At some later stage in di Cosimo's process, he painted over the background with an opaque black layer and added the figures of Saint John, Saint Cecilia, and angels. Infrared imaging uncovered further pentimenti: the right hand of the Christ Child was originally outstretched. This fact and the final position of the Christ Child, leaning to the left side of the picture, suggest that di Cosimo may have always planned to include the figure of Saint John in the composition.

GALLERY 211

Saint John in the Wilderness (1618/25), Spanish

The case to crack with this striking Baroque painting was of the "who done it" variety. Though attributed to the Spanish painter Diego Velázquez when it came to the museum in 1957, the work's authorship has since been much debated by scholars, so our sleuthing conservators undertook an extensive study of the painting's fabrication, using x-ray, infrared imaging, and pigment and cross-section analysis. Most findings confirm Velázquez as the author—the most distinctive being the presence of "brush markings." Only visible in this painting with infrared imaging, these marks reflect the artist's habit of wiping his brush on unpainted parts of the canvas during his working process. Found in many of his works throughout his career, the wipings seem to have been a way in which he adjusted the amount of paint on his brush or checked colors. Though idiosyncratic enough to be thought of as a Velázquez hallmark, these markings are only part of the puzzle that must be considered in determining who is indeed the creator of this work.

GALLERY 240

A Sunday on La Grande Jatte (1882–1884) by Georges Seurat

Renowned for this monumental canvas the world over, Georges Seurat created his famous work in three stages: initially laying in the composition in an Impressionist style, later adding more regularized dots of color and enlarging some of the silhouettes in a second stage, and finally re-stretching the canvas to turn the original tacking edges to the surface plane in order to paint the colored border. Examination of the painting, using infrared reflectography and X-radiography, in preparation for the 2004 exhibition *Seurat and the Making of La Grande Jatte*, revealed a surprisingly late, previously undetected addition to the canvas; the monkey in the foreground was added over the painted grass, which means it was not part of the original composition. If you look closely, you can see the underlying forms of the man's shoes and the woman's skirt peeking through the slightly translucent paint layer. In contrast, the little dog was always part of the scene.

GALLERY 242

At the Moulin Rouge (1892/95) by Henri de Toulouse-Lautrec

If you had to pick out the most dramatic figure in this painting—the point that really draws the viewer's eye—it would most likely be the greenish blue face of the notorious performer May Milton at the very right of the canvas. She looms large in Lautrec's group portrait depicting the performers and friends who gathered nightly at the famous Paris night spot, the Moulin Rouge. A photograph from 1902, one year after the artist's death, however, shows the painting without Milton and the L-shaped strip of canvas at the right and bottom sides. Although infrared imaging clearly indicates where the canvas had been cut down, the reasons why it was done remain unclear. Some have speculated that Lautrec's dealer and friend Michel Manzi may have wanted to make the painting more salable by eliminating the imposing face of the performer. Whatever the reason, the canvas was reassembled by 1914, well before the painting became part of the Art Institute's collection, Ms. Milton once again stealing the show.

GALLERY 391

The Old Guitarist (1903/04) by Pablo Picasso

When a painting is as iconic as Picasso's *The Old Guitarist*, it's hard to imagine it wasn't the original image that the artist laid on this wooden panel, and yet using the techniques of X-radiography and infrared reflectography, conservators have identified two underlying paintings. Picasso first painted an image of an older woman with her head bent forward and arms stretched out imploringly; he then painted over this with a young mother, a child kneeling at her side, and two cows looking on. The artist never painted out the earlier works but instead laid one directly on top of the other, thereby leaving evidence behind. Above the guitarist's head and neck, for example, one can just make out the underlying contours of a woman's face when light rakes across the surface. Our conservator's images of these hidden paintings have led to the discovery of corresponding sketches in Picasso's letters and journals. See the two underlying images and learn more about this conservation research project at www.artic.edu/aic/conservation/revealingpicasso.

GALLERY 154A

Statue of Osiris (4th–1st century B.C.), Egyptian

Ancient Egyptians were true revolutionaries when it came to expanding the spectrum of colors available to artists. By exploiting their lands' rich mineral ores and innovative technologies, they made the quantum leap from the prehistoric palette of four colors—black and white, as well as red and yellow ocher—to using a full rainbow of precious and expensive colors. In an analysis of pigments used on this very well-preserved statue of Osiris, the god of the underworld, conservators—working in concert with our museum scientists—found the sophisticated use of Egyptian blue. Termed *iryt hsbd* in Egyptian, which literally means "artificial lapis lazuli," this light blue color was the first synthetic pigment ever manufactured. Combining the native calcareous sand, soda, copper compounds, and water, the forward-thinking Egyptians created a blue so vibrant and resistant to fading that no synthetic equal was created until modern times. Medieval and Renaissance artists, unable to recreate the Egyptian formula, were forced to make their blues by crushing the much more costly natural stones azurite and lapis lazuli.

Looking for more behind-the-scenes revelations from the conservation lab?

Check out the museum's blog, ARTicle, for posts on recent conservation projects, and join us for upcoming lectures featuring museum conservators like "The Game Is the Thing: DuPacquier Gaming Box" on March 31 and "Out of the 'Messenger' Box: A Renaissance Woodcut and the Box It Came In" on May 5.