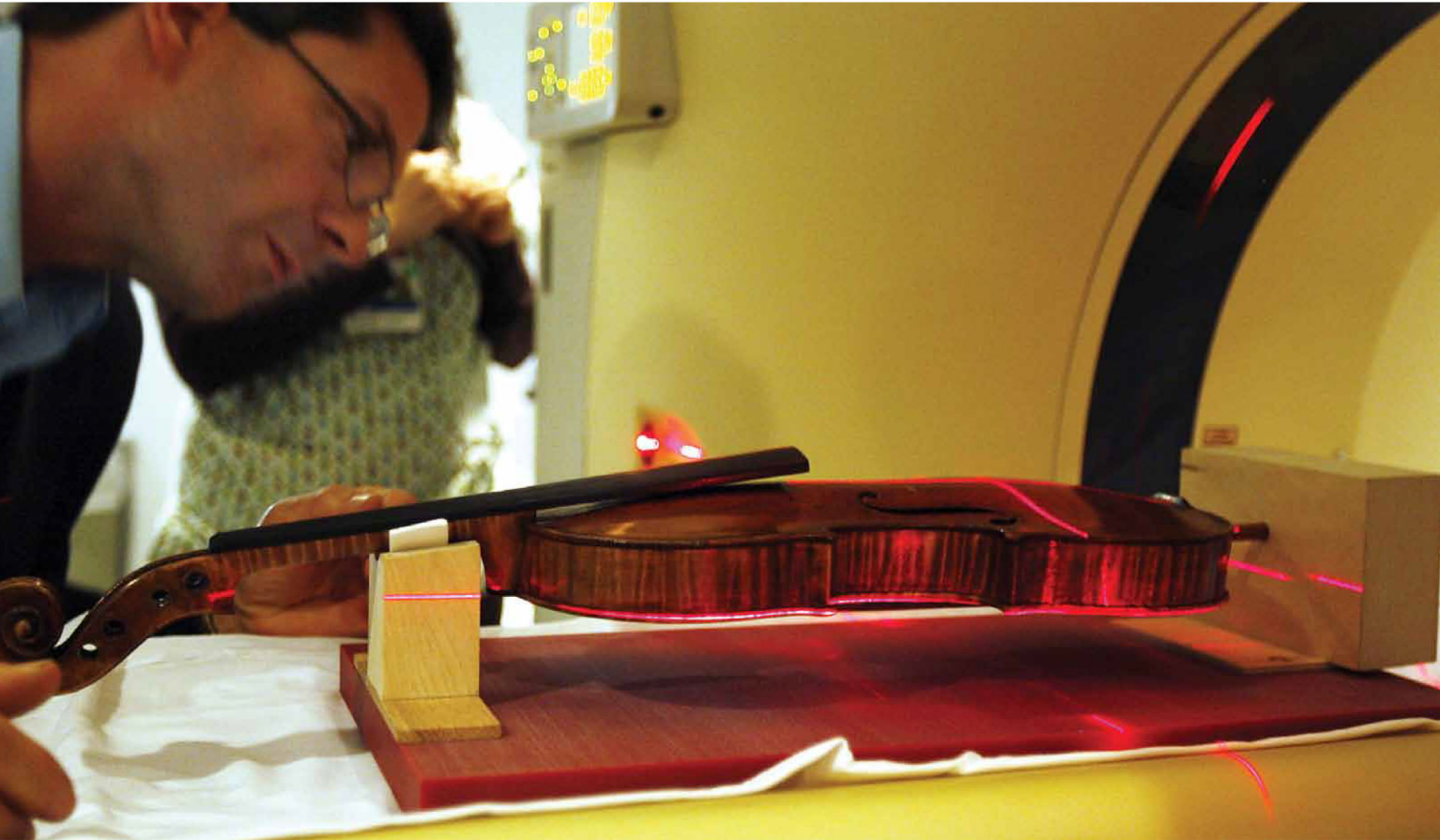


“THE SCANS CAN SEE THROUGH THE GRAIN PATTERNS INSIDE THE INSTRUMENT WITHOUT HAVING TO TAKE IT APART.”

— DR. JOHN BONNETT



Setting the Stage
Luthier Raymond Schryer aligns
the violin before it is scanned at
Henry Ford Medical Center.

Bonnett does admit that by night, when human subjects aren't on the schedule, he has, on occasion, sent an inanimate object or two through the machine's narrow tunnel. He's not the first. Look online and you'll find that CT scans of a variety of objects have been taken, from iPhones and toasters to Big Macs and Barbies.

Easy to see why Bonnett jumped at the opportunity to add a rare musical instrument to his extracurricular list of scanned objects when curators and conservators from The Henry Ford in Dearborn approached him with an intriguing proposition. They had three violins in their collection, crafted by some of the world's most renowned instrument makers, which they wanted to scan. Their mission was to get a better idea about the instruments' construction. In addition, they wanted to learn more about any possible undetected damage.

Bonnett had heard of such examinations before and thought the idea brilliant. "The scans can see through the grain patterns inside the instrument without having to take it apart."

THE MUSEUM

Mary Fahey, chief conservator of The Henry Ford, said the scanning process was fascinating. "It's the joy of being able to explore a violin by looking through the layers of the wood. The scans allowed us to see areas that have been damaged previously or, in some instances, repaired previously."

In general, the curators discovered that despite about two-and-a-half centuries' worth of moves, climate changes and handling by countless musicians, the three instruments scanned were in extremely good condition.

For example, a Guarneri violin — the rarest in the collection — did have some insect damage, where bugs long ago had eaten into the scroll and the top surface of the instrument.

"But amazingly enough," said Fahey, "the violin has been repaired, which we had never seen from the surface because the repairs are just so skillfully executed."

THE MUSIC

Because Ford's collection boasts some of the oldest and rarest violins, musicians and instrument makers alike ask to hold the violins, play them and study what makes them so superior to violins by other makers.