

National Music Museum

Newsletter



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Opening January 20, 2023

Ana Sofia Silva, Curator

The National Music Museum (NMM) is celebrating 50 years in the making with a special exhibition "As Good as Gold: The First 50 Years (1973-2023)." Since its official inception in 1973, the NMM has collected musical instruments and related materials spanning five centuries. That's 500 years of history, tradition, innovation, and music-making! Today, the NMM holds one of the world's premiere collections of musical instruments.

The exhibition opened January 20 in the Jason and Betsy Groves Special Exhibition Gallery and will run through October, 2023. Admission is free and open to the public on Wednesdays, Thursdays, and Fridays from 10 a.m. to 4 p.m., and on Saturdays from noon to 4 p.m.

"As Good as Gold" explores the function of collecting in museums with a particular emphasis on how the NMM collecting originated and evolved. From the founding collection to recent acquisitions. the exhibition features some of the treasured instruments that shaped the NMM during its first 50 years of history.

Five "timeline" themes highlight a particular period in the history of the NMM collections:

• "Filling The Gaps" describes the period of collecting that happened after the donation of the founding Arne B. Larson Collection in 1979. A selection of early woodwind instruments and a harpsichord acquired during this time illustrates the intention to "fill in the gaps" in the European collection, particularly in the areas of 16th- to early 19th-century instruments. Included in this group are a 1793 basset horn from Prague (NMM 3541); a ca. 1720 oboe from

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Amsterdam (NMM 4547): a ca. 1700-1725 tenor recorder from Brussels (NMM 4879); an original Adolphe Sax, ca. 1861 tenor saxophone (NMM 4039); and a 1659 Flemish harpsichord (NMM 3985) from Antwerp.

• "Once In A Lifetime" was the phrase used when the famed Witten Collection of early Italian stringed instruments became available in 1984, and NMM Director André P. Larson recognized a "once-in-a-lifetime" opportunity to secure the museum's identity as a major cultural institution. The selection of instruments in this group includes the Amati "King" cello (NMM 3351); a Stradivari violin (NMM 3598) and guitar (NMM 3976); a ca.

1538 cittern from Urbino

(NMM 3386); and the

1767 Antunes

piano (NMM

5055).

"Crescendo" represents the period of arowth of the NMM collections between the

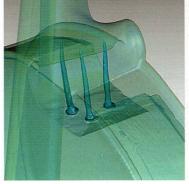
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Four Italian Stringed Instruments Receive Micro-CT Scans

Arian Sheets, Curator of Stringed Instruments

The National Music Museum's collection is famous for its exceptionally well preserved Italian stringed instruments. In December 2022, four of the most important of these traveled to Minneapolis to receive state-of-theart micro-CT scans at Laser Design, a division of CyberOptics. While medical CT scans performed at Sanford Vermillion Hospital have been vital tools for evaluating the condition of instruments in the collection, they are tailored for scans of living tissues, and thus are limited in terms of the length and power of the scanning. Micro CT, used in industrial applications, has opened a new field of possibilities for advanced imaging and reverse engineering of historical musical instruments due to the higher resolution and optimized settings. Master violin makers Raymond Schryer of Richards Landing, Ontario, and Bill Scott of Minneapolis proposed a project to scan the NMM's "Harrison" Stradivari violin (1693), the Andrea Amati violin (1574), the Nicolo Amati violin (1628), and the Nicola Bergonzi viola (1781), all made in Cremona, Italy. These four instruments are of particular interest to modern makers for understanding the principles behind classical Cremonese making, and the outputs of the project will allow them to be the focus of study and interpretation by the Oberlin Violin Makers Association and the Canadian Association of Violin and Bow Makers, which jointly provided funding for the project.

Musical instruments pose some challenges for scanning in that they are made from materials with a variety of densities, including metal, which can introduce flaws in the image. Kyle Kammerud, Laser Design's 3D Scanning Lab Manager, deftly navigated the challenges, producing files that Raymond Schryer will use to reverse engineer individual components, such as the scroll, top, and back. These components can be reproduced using stereolithography (industrial 3D printing) and CNC carving to generate 3D models that makers can use at the bench when making their own versions of the instruments. To supplement existing technical drawings, Schryer intends to produce makers' kits for each instrument, initially available to attendees of the Oberlin Violin Makers Workshop. which will include an internal mold, laser-cut arching templates, and plastic copy of the scroll, in addition to computer files with 3D renderings. This revolutionary step forward will greatly enhance access of important data from these instruments to inspire and educate modern makers. The National Music Museum is grateful to be a part of this cutting edge research and highly values our strong relationship with the instrument making community. We would like to thank Schryer and Scott for selecting our treasures for the project and for their impressive organization and preparation, Givens Violins for safe storage of the instruments, and CyberOptics for smooth execution and expert processing of the scans.



Above and right: 3D renderings from micro-CT scans produced of NMM 6046, viola by Nicola Bergonzi, Cremona, 1781. Note the original metal nails used to attach the neck to the body.

Below: Raymond Schryer positions an instrument in a jig that holds it upside down in the scanner in order to scan the scroll. Photo by Arian Scheets.



