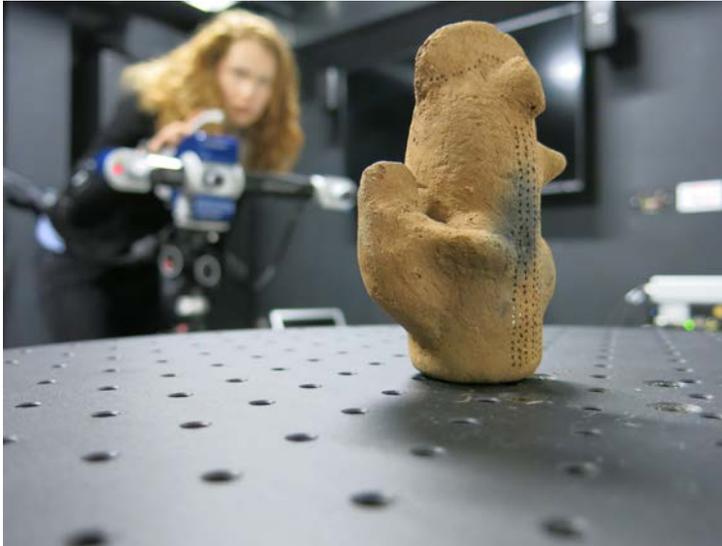


# The Future of Imaging the Past: New Research into Digital Imaging



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The Smithsonian's vision of "shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world" requires a commitment from the entire Smithsonian. Important digital imaging initiatives at the Smithsonian include catalog and exhibition photography, 3D capture, and mass digitization. These activities depend on new developments and advancements in the digital technologies and computing. The future of imaging for research and conservation of museum collections includes the current documentation within the visible range with the shape geometry but will integrate another dimension that includes spectral data. This multidimensional dataset and integrated approach will require advanced processing and a multidisciplinary assessment to extract enhanced information about the condition, manufacture, and materials of an object. This presentation will focus on scientific imaging techniques and technologies at MCI's Imaging Studio: digital radiography; spectral imaging including UV, IR, multispectral and hyperspectral; reflectance transformation imaging (RTI); and photogrammetry. But more importantly, it will focus on new research into the integration of spectral and 3D techniques, the reproducibility and comparability of the acquired image data, and the visualization and interpretation of the resulting data to understand and conserve museum collections.

**MCI**  
Topics in  
Museum  
Conservation

**May 26, 2016**  
**10:45 am**  
**Thursday**

MCI Theater  
MUSEUM SUPPORT CENTER  
4210 Silver Hill Road  
Suitland, MD 20746  
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Smithsonian  
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