Creation of the Mecklenburg Materials Archive

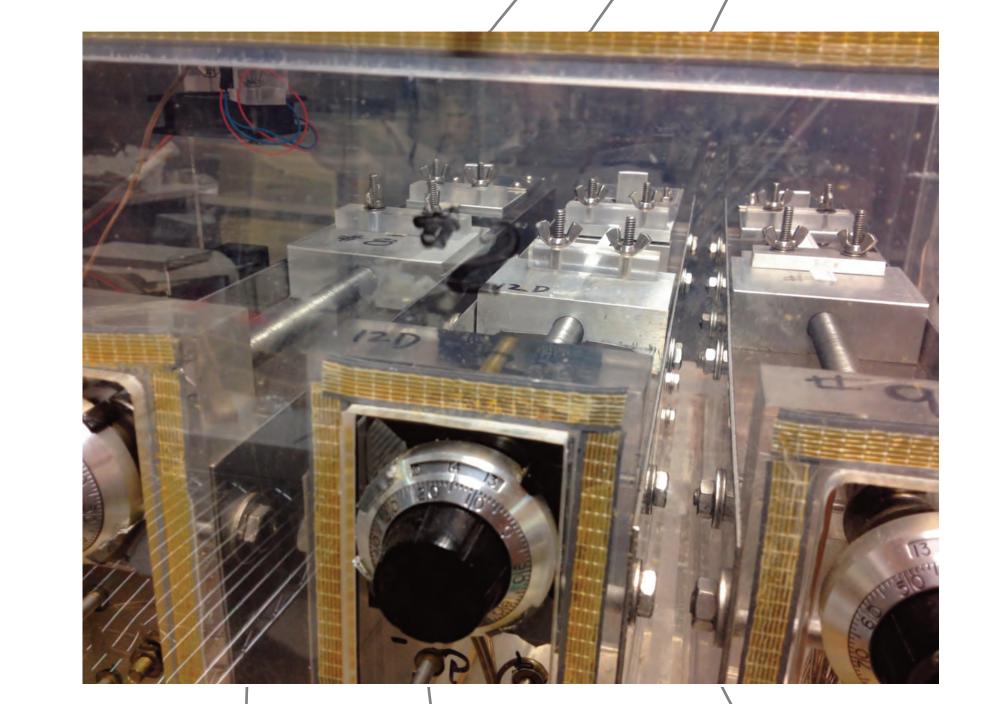
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For nearly forty years, conservator, scientist, and engineer Marion Mecklenburg studied the mechanical behavior of art materials, with resulting discoveries that had—and continue to have—a direct impact on the preventive and treatment efforts of collections professionals around the globe. While conservators of fine art have traditionally focused on the chemical deterioration of art materials, Dr. Mecklenburg argued that the physical behavior of those artworks is further understood, predicted, and managed when approached as an engineering problem. Through his own studies—and through the studies of the countless researchers who worked or trained with him—Mecklenburg made mechanical engineering a formative aspect of conservation research.

Dr. Mecklenburg retired from the Smithsonian Institution in 2010 and the organization of decades of his materials, research, and equipment is underway at the Smithsonian's Museum Conservation Institute (MCI), in collaboration with the Smithsonian Institution Archives. The Mecklenburg Materials Archive will be housed at MCI and will contain the wood, fabric, and paint samples prepared and studied by Dr. Mecklenburg, and will provide researchers with access to the raw materials (such as custom-made paints) from which those samples were created. The Archive will include working and study samples of the equipment used over the course of Dr. Mecklenburg's career (and information for those interested in building similar equipment); a library of notes, books, and publications related to the environmental,

lighting, and material mechanics research of Dr. Mecklenburg and his colleagues; and correspondence related to the archived samples, the commercial production of art materials, and the application of engineering principles to the study of material behavior in artwork. This project will combine conservation, materials science, and library science principles to fashion an archive of materials and reference data with a cataloging system appropriate to mixed collections intended for historical study as well as for continued use and analysis.





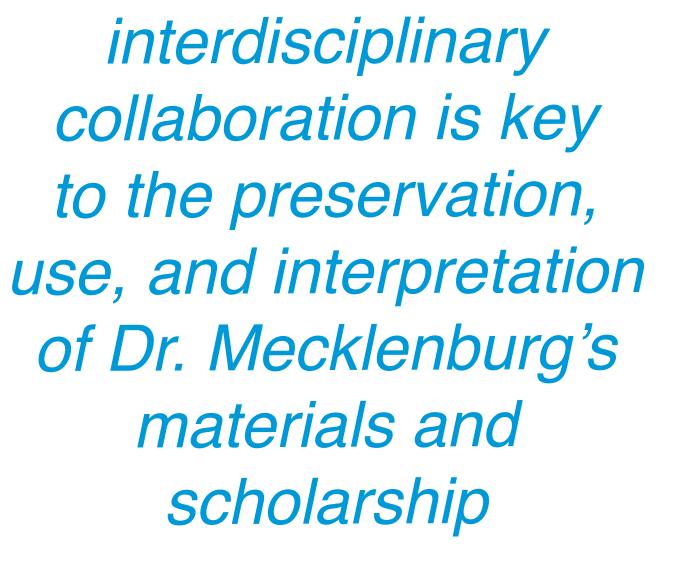
Smithsonian

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Image, right: Dr. Marion Mecklenburg in 1990, examining scanning electron micrographs of transparent papers following conservation treatment. Images at left, clockwise from top: A mobile hanging system for storage of paint drawdowns allows for air circulation and regular light exposure; some of the hundreds of historical or customblended paints contained in the Archive collection; the Archive contains fully functioning tensile testing equipment as well as spare parts, schematics, and instructions for building similar equipment.





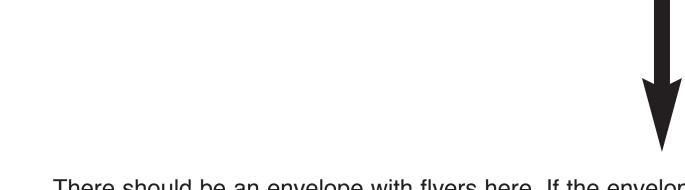
storage

- Determine best practices for each material
- Create dedicated spaces for stored collections, active collections, and researchers
- Plan and schedule reviews of storage protocols and conditions
- Merge CIS systems for archival and specimen collections.
- Work with library sciences and collections management students to determine best practices and mixed collections protocols
- Design a CIS database to cross-reference Archive materials and provide access to related analysis and published research

cataloging

access

We need your help!



- Make finding aid available through Smithsonian Libraries database
- Crowdsource bibliography through online platform (Mendeley)
- Implement tracking and lending protocols
- Document practices and assess progress through presentations, social media, and symposia/working groups

