

Purdue University

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**Schools of
Materials
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Anthropology**

Date: Friday,

Sept. 21, 2012

Time: 3:30 Refreshments

3:45 Seminar

Place: ARMS 1010



**Infinite
Possibilities**

CSI: Conservation Science Indianapolis

By:

Gregory Dale Smith, Ph.D.

Otto N. Frenzel III Senior Conservation Scientist



Indianapolis Museum of Art

ABSTRACT

The Indianapolis Museum of Art recently launched a state-of-the-art materials analysis lab to conduct research on its encyclopedic collection of artworks and to assist in the preservation of these objects. This lecture will introduce the role of the scientist in a fine arts museum, describe the construction and outfitting of a museum laboratory, and explore a range of technical studies of artworks using advanced analytical instrumentation. In particular, Dr. Smith will discuss the examination of an 18th century Italian oil sketch that was recently restored by the museum's paintings conservators. Using correlative microscopy techniques on microsamples taken from the artwork, IMA scientists realized that the previously restored painting had been aggressively overpainted, an observation that allowed the retrieval of obscured original brushwork by the artist.

SHORT BIO

Dr. Smith previously served as the Andrew W. Mellon Assistant Professor of Conservation Science at Buffalo State College, one of only three graduate programs for comprehensive art conservation training in the United States. He holds a Ph.D. in physical/analytical chemistry from Duke University and has completed postdoctoral research at the National Gallery of Art in Washington, D.C., the National Synchrotron Light Source at Brookhaven National Laboratory in New York, and at University College London.

Smith's research interests include studying condition issues affecting modern polymers used in art, pigment degradation processes, preservation environments, and the development and testing of innovative conservation treatments. Smith's academic and professional career is distinguished consistently with honors and awards, including a Marshall Sherfield Postdoctoral Scholarship to study in Britain, National Science Foundation Research Fellowships, and a Barry M. Goldwater Science Scholarship. He also has performed archaeological fieldwork in Galilee, Israel, serving as field chemist and supervisor on two excavations. Smith has authored numerous articles for journals in the fields of chemistry and conservation. He is a Professional Associate of the American Institute for Conservation (AIC), associate editor for the AIC's professional journal, a member of the AIC Education and Training Committee, former Chair of the AIC Research & Technical Studies Specialty Group, and current Adjunct Professor in the Chemistry and Chemical Biology Program at IUPUI. Dr. Smith currently teaches a graduate course for IUPUI chemistry and forensic science students, "Chemical Analysis in the Detection of Fakes, Forgeries, and Misattributions," on-site at the IMA.