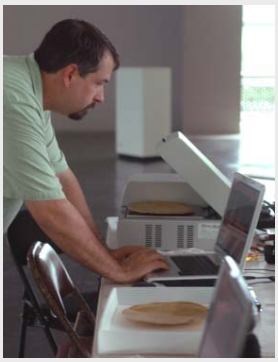
Smithsonian
Museum Conservation Institute

MCI **Weekly Highlight** 8 October 2010

Valuing World Cultures

MCI has collaborated with **Smithsonian Tropical Research Institute** (STRI) archaeologists since 2004, when MCI's Deputy Director **Paula DePriest** and STRI's **Richard Cooke** proposed a joint MCI-STRI project focused on metalworking, trade, and the rise of chiefdoms in pre-Contact Panama. Since 2004, MCI has contributed conservation and analytical expertise to archaeological projects in Panama and has carried out technical research on important Panamanian collections both in Panama and at the Smithsonian.



Above: (L to R) Kim Cobb (MCI fellow), Rae Beaubien, and Julia Mayo at STRI. Below left: Jeff Speakman conducting XRF analyses. Below right: Ainslie Harrison (former MCI fellow and current NMAI fellow) conserving a newly excavated gold disk at El Caño.

- **Reconstructing the history of goldworking in Pre-Columbian Panama**. Since 2007, MCI's Head of Conservation **Harriet F. (Rae) Beaubien** has guided a research program that brings a technological perspective to the study of the origins, development, and regional relationships of goldworking in this intermediate area of the Americas. Early in the project, the group relied primarily on iconographic and ethnohistoric lines of evidence, with limited archaeological context. Supported by awards from the Charles D. and Mary V. Walcott Foundation and the Samuel H. Kress Foundation, the MCI team, which included MCI's Head of Technical Studies **Jeff Speakman**, conducted research on-site in Panamanian collections, using non-destructive techniques, such as optical microscopy and portable X-ray fluorescence spectroscopy. Approximately 700 gold and related metal objects were examined, including more than 100 items previously excavated by Richard Cooke and colleagues at the site of Cerro Juan Díaz (Azuero Peninsula), as well as the extensive collection of the **Museo Antropológico Reina Torres de Araúz (MARTA)**. In 2009, supported by a Scholarly Studies grant, Beaubien and conservation fellows added more than 300 gold alloy objects to the study from the Pre-Columbian Panamanian holdings in the **National Museum of Natural History** and the **National Museum of the American Indian**. Since 2009, gold artifacts from ongoing STRI excavations at the sites of El Caño (Coclé) and Isla Pedro González (Pearl Islands) have enriched the dataset. Although the study includes unprovenienced material, artifacts with secure contextual information – such as those provided by STRI excavations – occupy a significant place in defining meaningful groupings based on technological type, using information about alloy composition, forming and finishing techniques. These data are expected to lend significant support to the development and testing of hypotheses that Pre-Columbian Panama was a center of sophisticated goldworking and cultural development, as part of Cooke and his colleagues pioneering scholarship.
- **Preserving the past: archaeological conservation at El Caño**. As part of the El Caño Archaeological Project, Rae Beaubien has supervised conservation fellows working with the archaeological team, directed by **Julia Mayo**, a former fellow and now research associate at STRI, both on site during the excavation phases as well as during the laboratory phases at STRI. Much of the excavated material is funerary in nature and, based on initial stylistic analysis, dates to the ca. 450–900 CE. The conservation team's involvement has enabled the safe recovery of fragile finds, collections care through stabilization, reconstruction, and careful re-housing for storage. During the spring 2010 field season, the conservators played a significant role in the field excavation of extraordinary burials, including gold finds. These efforts will be featured in an upcoming ***National Geographic Magazine*** article, and conserved materials are planned for inclusion in the inaugural exhibit of the new **Museum of Biodiversity** in Panama City.