Department of Biological Sciences
COLLEGE OF Arts and Sciences

SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: March 1, 2011

The Department of Biological Sciences is pleased to offer the following research project for the summer of 2011. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and, if possible, develop a timetable for the twelve-week research period.

PROJECT TITLE: Paleoethnobotanical Study of the Mughal Gardens of Naguar, Rajasthan, India

Professor David Lentz
Department of Biological Sciences
1403 Crosley Tower
Cincinnati, OH 45221-0006
Tel: (513) 556-9733
Fax: (513) 556-5299
Email: david.lentz@uc.edu

Project Description

The Naguar Project was initiated by the Mehrengarah Museum Trust in Rajasthan, India to generate a greater understanding of the history, ecology, horticulture and architecture of the Mughal palace and fort at Nagaur. The fort at Nagaur, on the edge of the Great Indian Thar Desert in the Rajasthan region of India, is a neglected yet exquisite example of Mughal architecture of the 16th century. Mughal structures are characterized by the ingenuity of their water systems, the beauty of their art and the balance struck between nature and the buildings themselves. Embodying these hallmark features is the Mughal style garden. These gardens were often walled, elaborately landscaped and populated by beautiful, fragrant flowers and trees. In our part of this larger project, the goal is to identify the plant remains that were collected during the excavations of the gardens located within the Nagaur palace. The results of the study will inform us about the horticultural prowess of the Mughal garden designers, the cultural implications of plants selected and the ability of the designers to maintain adequate water supplies in an extremely arid region.

It is the aim of this project is to understand the cultural milieu of the time as it was expressed in horticulture and provide insights into the restoration of the garden's previous splendor. To do so, seeds and charcoal samples taken from the site in Nagaur will be separated from the excavated material, mounted and photographed using electron microscopy. The micrographs obtained will then be analyzed to determine what trees, shrubs and herbaceous plants grew in the gardens during Mughal times.