### MECHANICAL & INDUSTRIAL ENGINEERING COLLOQUIUM: ME 794 001

# **Dr. Susan Pell**

Director of Science Brooklyn Botanic Garden 1000 Washington Avenue Brooklyn, NY 11225 718-623-7371

Wednesday, December 5, 2012 221 MEC 1:30 to 2:30 pm

## "Cashew Family (Anacardiaceae) Evolution: Fruits, Genes, and Dermatitis"

#### **ABSTRACT:**

ANACARDIACEAE, THE CASHEW FAMILY, IS AN ECONOMICALLY IMPORTANT, PRIMARILY PANTROPICAL GROUP OF 82 GENERA AND CA. 800 SPECIES. THE FAMILY IS WELL KNOWN FOR ITS CULTIVATED EDIBLE FRUITS AND SEEDS (MANGOS, PISTACHIOS, AND CASHEWS), DERMATITIS CAUSING TAXA (E.G., METOPIUM, SEMECARPUS, TOXICODENDRON, ETC.), AND LACQUER PLANTS (TOXICODENDRON AND GLUTA SPP.). THIS LECTURE WILL INTRODUCE YOU TO THE FAMILY AND PRESENT PRELIMINARY DATA ON THE EVOLUTIONARY RELATIONSHIPS OF THE FAMILY, WHICH WERE EVALUATED USING PLASTID (RPS16 AND TRNLF) AND NRDNA (ETS) SEQUENCE DATA. IMPORTANT CHARACTERISTICS SUCH AS TOXIC COMPOUNDS, DISPERSAL MECHANISM AND BIOGEOGRAPHY WILL BE DISCUSSED IN THE CONTEXT OF THE ELUCIDATED PHYLOGENY. A BRIEF OVERVIEW OF THE BOTANICAL ASPECTS OF THE COLLABORATIVE NJIT-BBG NSF-SPONSORED PROJECT WILL ALSO BE PROVIDED.

#### **BIOGRAPHICAL:**

SUSAN PELL IS THE DIRECTOR OF SCIENCE AT BROOKLYN BOTANIC GARDEN AND THE PRESIDENT OF THE TORREY BOTANICAL SOCIETY. SHE RECEIVED HER PH.D. FROM LOUISIANA STATE UNIVERSITY IN PLANT BIOLOGY AND HER BACHELORS DEGREE IN BIOLOGY FROM ST. ANDREWS UNIVERSITY IN NORTH CAROLINA. HER RESEARCH FOCUSES ON THE SYSTEMATICS OF THE CASHEW FAMILY, ANACARDIACEAE AND INCLUDES TRADITIONAL TAXONOMIC AS WELL AS MOLECULAR PHYLOGENETIC APPROACHES. DR. PELL TRAVELS WORLDWIDE FOR HER RESEARCH AND TEACHES NUMEROUS BOTANICAL COURSES AT COLLEGES AND ADULT EDUCATION PROGRAMS IN NEW YORK CITY.

For More Information Contact: Dr. R. Sodhi (973) 596-3362, sodhi@njit.edu