

**University of Puerto Rico  
Mayaguez Campus  
Chemistry Department  
Departmental Seminar**

**Friday, November 13<sup>th</sup>, 2015  
Q 123 – Abbot  
11:30 AM**

**by**

**Dr. Celina Casse  
Department of Engineering, Science and Materials**

**Expression of genetic markers during the differentiation of stem cells into bone cells.**

This talk will focus on the study of the expression of genetic markers during the differentiation of stem cells into osteoblasts (osteogenesis) through Real-Time Quantitative Retrotranscription-PCR (QT-PCR), an extremely sensitive method for assessing gene expression. The QT-PCR technique will be applied to evaluate the osteogenic properties of various metallic-based biomimetic nano-scaffolds that could be used as implant material candidates for regenerating a defective bone.