

## Uchenna C. Onwuegbusi

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**OBJECTIVE** To seek and secure admission into Medical School in fall 2013 after a well-rounded development of extensive scientific research, academic and interpersonal skills.

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**EDUCATION** **Bachelor of Science, Engineering (Biomedical Engineering)** GPA: 3.14 May 2013  
Tulane University, New Orleans, LA

**Bachelor of Arts, Physics**  
Xavier University of Louisiana, New Orleans, LA GPA: 3.89 May 2013

Minor: Mathematics

**Academic Honors:** Dean's List □ Xavier University Academic Endowment Scholarship □  
Coulter Foundation Research Scholarship □ Samuel Newhouse Academic Scholarship □ NASA  
STEM Academic Achievement Scholarship

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**RESEARCH EXPERIENCE** **Biomedical Engineering Research Assistant** October 2011-present  
Tulane University, Biomedical Engineering dept, New Orleans, LA

- Culturing large multi-cellular aggregates of breast tumor cells in the form of tumor spheroids, using hanging drop method in PDMS wells. These spheroids will be used for in vitro studies of PEI-HIFU ablation therapy for tumors.

**Summer Undergraduate Research Fellow** June-August 2011  
Mayo Clinic, Rochester, MN

- Performed series of experiments to determine and characterize the inhibitory effects of two herbal extracts, Resveratrol and Gallotannin, on the binding of calcium oxalate to renal epithelial cells in kidney stone formation.

**Chemistry Research Assistant** August 2010-Present  
Xavier University, New Orleans, LA

- Currently carrying out extensive research and performing series of experiments to form single molecule magnets by metal complex reactions with organic acids with multiple donor atoms such as galactaric acid and D-mannaric acid. These magnetic materials with microscopic dimensions if found will advance many braches of material science.

**Research Experience for Undergraduates (REU) Participant** June-August 2010  
University of Notre Dame, Notre Dame, IN

- Carried out theoretical research on spin polarized scanning tunneling microscopy, learned to operate a scanning tunneling microscope, and organized and managed the repair of an Omicron Ultra-high vacuum STM for the Electrical Engineering department.

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**WORK EXPERIENCE** Computer lab assistant, Xavier University August 2010-Dec 2010  
Biology tutor, Xavier University March 2009-present  
Biology grader/Dorm monitor for high school students Summer 2009

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**VOLUNTEER/HOSPITAL EXPERIENCE** Touro Hospital Volunteer/Physician shadowing (3 hours/week) January-present  
Children's Hospital Volunteer, New Orleans(2 hours/week) January-present  
Tulane Hospital, Atrial fibrillation Surgery shadowing (3hours) October 2011  
Mayo Clinic , Minnesota ( Physician shadowing, 2 hours/week) June 2011-August 2011  
Notre Dame Nursing Home volunteer January 2011-May 2011

Physics tutor, New Orleans Public High Schools

August 2009-May 2011

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**LEADERSHIP  
& SERVICE**

Member, Society of Women Engineers

Nov 2011-present

Academic Excellence Chair, National Society for Black Engineers

August 2010-May 2011

Wellness Peer Counselor, Xavier University Counseling Center

August 2009-May 2011

Student member, American Physical Society

August 2009-August2010