

**ANITA KUMARI PATLOLLA, Ph.D.,  
ASSISTANT PROFESSOR**

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**EDUCATION:**

<b>2002-2004</b>	Post-Doc	Genetic/Molecular Toxicology	Jackson State University
<b>1998-2000</b>	Post-Doc	Cerebral Vasospasm [Stroke]	UMMC, Jackson. MS
<b>1992-1997</b>	Ph.D	Environmental Science [Genetics]	Jackson State University

**PROFESSIONAL EXPERIENCE:**

**Oct 2012-Present** – Assistant Professor, Dept. of Biology/Env.Sci, Jackson State University  
**2004 – Sept-2012** – Research Assistant Professor. Dept. of Biology/Env.Sci, Jackson State University  
**2003 – 2007** - Adjunct On-line Faculty, Dept. of Biology, Hinds Community College, Raymond, MS.  
**2002 – 2004** - Post-Doctoral Research Associate, Molecular Toxicology Laboratory, JSU, Jackson, MS.  
**2000 – 2001** - Adjunct Instructor, Hinds Community College, Raymond, MS.  
**1998 – 1999** - Post- Doctoral Research Associate, Dept. of Neurosurgery, University of Mississippi Medical Center.  
**1993 – 1997** - Graduate Teaching Assistant. Dept of Chemistry/Biology, Jackson State University.

**PROFESSIONAL AFFILIATIONS:**

Society of Toxicology [**SOT**]  
American Nano Society [**ANS**]  
Environmental Mutagen Society [**EMS**]  
American Association of Cancer Research [**AACR**]  
The Society of Environmental Toxicology and Chemistry [**SETAC**]  
Mississippi Academy of Sciences [**MAS**]  
European Association of Cancer Research [**EACR**]

**AWARDS & HONORS:**

American Association of Cancer Research awarded MSI Faculty Scholar Award for outstanding research in cancer for **2010**.  
American Association of Cancer Research awarded MSI Faculty Scholar Award for outstanding research in cancer for **2009**.  
American Association of Cancer Research awarded MSI Faculty Scholar Award for outstanding research in cancer for **2008**.  
American Association of Cancer Research awarded MSI Faculty Scholar Award for outstanding research in cancer for **2007**.

**Research Fundings**

**Co-PI** “Nanosilver Toxicity in Human and Experimental Organisms” funded by US –Army (CMCM) for **2010-2012** for \$222, 980 per year.

**PI** for “Toxicity and Tissue distribution of carbon nanotubes in Swiss-Webster mice” funded by Air Force Research Laboratory, AFRL/HE FY07 HBCU/MI Set-Aside Program”. Award # FA8650-07-1-6851(\$130,000/year) for **2007-2009**.

**PI** for “In vitro genotoxicity of carbon nanotubes in normal human fibroblasts cells” funded by- NIH-EARDA award (\$10, 000) for **2006 -2007**.

**PI** for “ Genotoxicity of carbon nanotubes in Swiss-Webster mice – A risk assessment model” funded by Title III – strengthening HBCU” (\$15,000) for summer **2007**.

**Society of Toxicology** --- Chairperson for the scientific session “**Nanotoxicology- Carbon nanotubes**” for 50<sup>th</sup> Annual Meeting of SOT for **2011**.

**Society of Toxicology** --- Chairperson for the scientific session “**DNA repair and Genotoxicity**” for 46<sup>th</sup> Annual Meeting of SOT for **2007**.

**2012-** Who’s who in Biltmore Professional Networking and Executive.

**2011-** Who’s who in Marquis among America’s Scientist.

**2010** - Strathmore's Who’s Who among Professional Achievements

**2009-** Who’s who in Marquis among America’s Scientist.

**2008-** Who’s who in Madison Executive Research Scientists

**2007-** Who’s who in American Education

**2006-** Who’s who in Marquis among America’s Scientist.

**2012-** **CESTEME Summer Program- Mentor to Mrs. Tammy Epting and Mrs. Beth Thrasher (Wingfield School Teachers)**

**2011-2012-** **Co-Advisor & Mentor to Ms. Tina Moore and Ms. Chandra Stoke, Christian Rogers (Environmental Science Ph.D students) and mentor to Ms. Ashley Berry, Imani Nelson (Undergraduate student)**

**2010-** **Summer Student (Service): LaBethany May (SEPA Program: Murray High School)**

**2009-** **Summer students (service): Britney McGinnis (REU chemistry program); Ashley Berry (SEPA, Collins High school) & Dominique Land, (Murray High School)**

**2005 – 2009-** Mentored high school and undergraduate students under STARGE, LS-MAMP and SEPA Programs. (**Constance Barnes, Brionna Knighten, Jasmine Fields and Christopher Sims**)

**2005 – 2007 –** Advisor to Graduate student **Kirbie Clark** (Student is in Ph.D. Program in UT at Houston)

**2008-2010 – Advisor to Diahanna Hacket (LS-MAMP)**

**Dissertation Mentor:** Venkatrami Reddy Velma, Pamela Moore (Ph.D student)

**2004-2008** - Member of planning committee for International Symposium on Recent Advances in environmental Health research.

**2009-2011:** Science fair Judge, Jackson State University

## **Editorial Activities**

Editorial Board Member for “**Journal of Nanomedicine and Nanotechnology**” **Open-Access**, Sunnywale, CA, USA.

Editorial Board Member for “**Journal of Nanomedicine and Biotherapeutics**” **Open-Access**, Sunnywale, CA, USA.

Editorial Board Member for “**Journal of Analytical and Environmental Toxicology**” **Open-Access**, Sunnywale, CA, USA.

Editorial Board Member for “**International Journal of Nano Studies and Technology (IJNST)**” **Open-Access**, SciDoc Publishers

## **SELECTED PUBLICATIONS:**

**PATLOLLA ANITA, TODOROV TODOR I, TCHOUNWOU PAUL, VOET GIJSBERT VAN DER, CENTENO JOSE.** Arsenic-induced biochemical and genotoxic effects and distribution in tissues of Sprague–Dawley rats. **Microchemical**, September 2012, [doi.org/10.1016/j.microc.2012.08.013](https://doi.org/10.1016/j.microc.2012.08.013)

TCHOUNWOU PB, YEDJOU CG, **PATLOLLA AK**, SUTTON DJ. Heavy metal toxicity and the environment. **EXS. 2012;101:133-64.**

**PATLOLLA ANITA**, BERRY ASHLEY, MAY LEBATHANI AND TCHOUNWOU PAUL. Genotoxicity of Silver Nanoparticles in *Vicia faba*: A Pilot Study on the Environmental Monitoring of Nanoparticles. **Int J Environ Res Public Health. 2012 May;9(5):1649-62.**

MOORE PAMELA D, **PATLOLLA ANITA**, TCHOUNWOU PAUL B. Cytogenetic evaluation of malathion-induced toxicity in Sprague-Dawley rats. **Mutat Res. 2011 Oct 9;725(1-2):78-82.**

**PATLOLLA ANITA**, BERRY ASHLEY AND TCHOUNWOU PAUL. Study of hepatotoxicity and oxidative stress in male Swiss-Webster mice exposed to functionalized multi-walled carbon nanotubes. **Molecular and Cellular Biochemistry, 2011 Dec; 358(1-2):189-99.**

**PATLOLLA ANITA**, MCGINNIS BRITTNEY AND TCHOUNWOU PAUL. Biochemical and histopathological evaluation of functionalized single-walled carbon nanotube in Swiss-Webster mice. **Journal of Applied Toxicology Jan 2011, 31(1):75 - 83**

**PATLOLLA ANITA**, HUSSAIN SABER, SCHLAGER JOHN, PATLOLLA SRIKANT, AND TCHOUNWOU PAUL. Comparative clastogenic study of functionalized and non-functionalized multi-walled carbon nanotube in bone marrow cells of Swiss-Webster mice. **Environmental Toxicology, Dec 2010, 25(6):608-621**

**PATLOLLA ANITA**, PATLOLLA BABU AND TCHOUNWOU PAUL. Evaluation of cell viability, DNA damage and cell-death in normal human dermal fibroblast cells induced by functionalized multiwalled carbon nanotube. **Molecular & Cellular Biochemistry 2010, 338: 225-232.**

**PATLOLLA ANITA**, CONSTANCE BARNES, JASMINE FIELDS, DIAHANNA HACKETT AND PAUL B. TCHOUNWOU. Potassium Dichromate Induced Cytotoxicity, Genotoxicity and Oxidative Stress in Human Liver Carcinoma (HepG<sub>2</sub>) Cells. **IJERPH 2009, 6:643-653**

**PATLOLLA ANITA**, CONSTANCE BARNES, YEDJOU CLEMENT, VELMA V. REDDY, AND PAUL B.TCHOUNWOU. Oxidative stress, DNA damage and antioxidant enzyme activity induced by hexavalent chromium in Sprague-Dawley rats. **Environmental Toxicology, 2009, 24(1):66-73.**

**PATLOLLA ANITA**, ARMSTRONG NAJEALIKA and TCHOUNWOU PAUL. Cytogenetic evaluation of potassium dichromate toxicity in bone marrow cells of Sprague-Dawley rats. **Metal Ions in Biology & Medicine vol 10:353-358, 2008].**

ARMSTRONG NAJEALIKA, **PATLOLLA ANITA** and TCHOUNWOU PAUL. Protective effect of ascorbic acid against chromium-induced hepatic and renal toxicity in sprague-dawley rats. **Metal Ions in Biology & Medicine vol 10: 636:641, 2008].**

**PATLOLLA ANITA** and TCHOUNWOU PAUL. Arsenic trioxide induced oxidative stress in Sprague-Dawley rats. . **Metal Ions in Biology and Medicine vol. 9: 417 - 421, 2006.**

**PATLOLLA ANITA** and TCHOUNWOU PAUL. Serum alkaline phosphatase as a biomarker of arsenic-induced hepatobiliary or cholestatic effect in Sprague – Dawley rats. **Metal Ions in Biology and Medicine vol. 9: 422- 425, 2006.**

CENTENO JA, TCHOUNWOU PB, **PATLOLLA AK**, MULLICK FG, MURAKATA L, MEZA E, TODOROV T, GIBB H, LONGFELLOW D & YEDJOU CG. Environmental pathology and health effects of arsenic poisoning: a critical review. **In Managing arsenic in the environment from soil to human health**, CERAR, Stockholm, Sweden, **Feb 2006.**

**PATLOLLA AK, TCHOUNWOU PB.** Cytogenetic Evaluation of arsenic trioxide toxicity in Sprague-Dawley rats. **Mutation Research**, 587 (1-2), 126 – 133, **2005**.

**PATLOLLA AK, TCHOUNWOU PB.** Serum Acetyl Cholinesterases as Biomarker of arsenic-induced neurotoxicity in Sprague-Dawley rats. **IJERPH** 2(1): 80-83, **2005**.

TCHOUNWOU PB, **PATLOLLA AK, CENTENO JA.** Serum Amino-Transferases as Biomarkers of arsenic-induced hepatotoxicity in Sprague-Dawley rats. **Metal Ions in Biology and Medicine** vol 8: 284-288, **2004**.

TCHOUNWOU PB, **PATLOLLA AK, CENTENO JA.** Health risk assessment and management of arsenic toxicity and carcinogenesis. **Metal Ions in Biology and Medicine** vol. 8: 14-18, **2004**.

TCHOUNWOU PAUL, CENTENO JOSE, **PATLOLLA ANITA.** Arsenic toxicity, mutagenesis, and carcinogenesis- a health risk assessment and management approach. **Molecular and Cellular Biochemistry** 255(1&2): 47-55, **2004**.

TCHOUNWOU PAUL, **PATLOLLA ANITA, CENTENO JOSE.** Carcinogenic and Systemic Health Effects Associated with Arsenic Exposure- A critical Review. **Toxicol Pathol** 31(6): 575-588, **2003**.

**PATLOLLA ANITA, ALEXANDER ZUBKOV, ANDREW PARENT, JOHN ZHANG.** Hemolysate activates P21RAS in rabbit basilar artery. **Life Sci.** 67(10):1233-1242, **2000**.

**PATLOLLA ANITA, JOHN ZHANG, KOTARO OGIHARA, ALEXANDER ZUBKOV ANDREW PARENT.** Role of tyrosine kinase in fibroblast compaction and cerebral vasospasm. **Acta Neurochir Supplement**, 76: 227-3

**PATLOLLA ANITA, KOTARO OGIHARA, KAZUYA AOKI, ALEXANDER ZUBKOV, EVA BENGTON, ANDREW PARENT, JOHN ZHANG.** Hemolysate induces tyrosine phosphorylation and collagen-lattice compaction in cultured fibroblasts: **Biochem and Biophys Res Commun.**14; 264(1): 100-107, Oct **1999**.

#### **PRESENTATIONS IN NATIONAL & INTERNATIONAL CONFERENCES:**

**PATLOLLA ANITA, BERRY ASHLEY, MAY LEBATHNI AND TCHOUNWOU PAUL.** Genotoxicity of silver nanoparticles in *Vicia faba*. 9<sup>th</sup> International Symposium on Recent Advances in Environmental Research, **Sept 16 -19, 2012**, Jackson, Mississippi, USA.

**PATLOLLA ANITA AND TCHOUNWOU PAUL.** Serum aminotransferases and alkaline phosphatases as biomarkers of hepatotoxicity in Sprague-Dawley rats exposed to silver nanoparticles. 103<sup>th</sup> Annual Meeting of the American Association for Cancer Research, **Mar 31-April 04, 2012**, Chicago, IL, USA.

**PATLOLLA ANITA, MCGINNIS BRITTNEY AND TCHOUNWOU PAUL.** Biochemical Analysis of certain liver enzymes in mice exposed to functionalized single walled carbon nanotube. 51<sup>th</sup> Annual Meeting of the Society of Toxicology. **Mar 11-15, 2012**, San Francisco, California, USA.

**PATLOLLA ANITA, MCGINNIS BRITTNEY AND TCHOUNWOU PAUL.** Biochemical Analysis of certain liver enzymes in mice exposed to functionalized single walled carbon nanotube. 8<sup>th</sup> International Symposium on Recent Advances in Environmental Research, **Sept 11 -14, 2011**, Jackson, Mississippi, USA.

**PATLOLLA ANITA** and HACKETT DIAHANNA. Genotoxicity study of silver nanoparticles in Sprague-Dawley rats. 50<sup>th</sup> Annual Meeting of the Society of Toxicology. **Mar 6-9, 2011**, Washington D.C, USA.

**PATLOLLA ANITA, HUSSAIN SABER, SCHLAGER JOHN AND PATLOLLA SRIKANT TCHOUNWOU PAUL.** Clastogenic study of functionalized and non-functionalized multi-walled carbon nanotube in bone marrow cells of Swiss-Webster mice. **3<sup>rd</sup> BangaloreNano, December 8-9, 2010, Bangalore, Karnataka, India.**

**PATLOLLA ANITA and HACKETT DIAHANNA TCHOUNWOU PAUL.** Genotoxicity study of silver nanoparticles in Sprague-Dawley rats. **NANO-2010, Dec 17-19, 2010, GITAM UNIVERSITY, Vizag, India.**

**PATLOLLA ANITA, BERRY ASHLEY, MAY LEBATHNI AND TCHOUNWOU PAUL.** Genotoxicity of silver nanoparticles in *Vicia faba*. **7<sup>th</sup> International Symposium on Recent Advances in Environmental Research, Sept 12 -15, 2010, Jackson, Mississippi, USA.**

**PATLOLLA ANITA, HUSSAIN SABER, SCHLAGER JOHN, PATLOLLA SRIKANT, AND TCHOUNWOU PAUL.** Comparative clastogenic study of functionalized and non-functionalized multi-walled carbon nanotube in bone marrow cells of Swiss-Webster mice. **49<sup>th</sup> Annual Meeting of the Society of Toxicology. Mar 7-10, 2010, Salt Lake City, Utah, USA.**

**PATLOLLA ANITA, BRIONNA KNIGHTEN and TCHOUNWOU PAUL.** Multiwalled carbon nanotube induces cytotoxicity, genotoxicity and apoptosis in normal human fibroblast cells. **100<sup>th</sup> Annual Meeting of the American Association for Cancer Research, April 18 -22, 2009, Denver, CO, USA.**

**PAMELA MOORE, PATLOLLA ANITA and TCHOUNWOU PAUL.** Cytogenetic evaluation of malathion toxicity in bone marrow cells of Sprague-Dawley rats. **100<sup>th</sup> Annual Meeting of the American Association for Cancer Research, April 18 -22, 2009, Denver, CO, USA.**

**PATLOLLA ANITA, HUSSAIN SABER AND TCHOUNWOU PAUL.** Sensitivity evaluation of cytotoxicity assays and cell lines following exposure to silver nanoparticles. **6<sup>th</sup> International Symposium on Recent Advances in Environmental Research, Sept 13 -16, 2009, Jackson, Mississippi, USA.**

**PATLOLLA ANITA, ASHLEY BERRY, DOMINIQUE LAND AND TCHOUNWOU PAUL.** Determining cytotoxicity of nano iron oxide in HepG2 cell line using MTT assay. **6<sup>th</sup> International Symposium on Recent Advances in Environmental Research, Sept 13 -16, 2009, Jackson, Mississippi, USA.**

**PATLOLLA ANITA, SRIKANT PATLOLLA, JOHN SCHALAGAR, SABER HUSSAIN and TCHOUNWOU PAUL.** Cytogenetic evaluation of multiwalled carbon nanotube toxicity in bone marrow cells of Swiss-Webster mice. **48<sup>th</sup> Annual Meeting of the Society of Toxicology. Mar 15-19, 2009, Baltimore, Maryland USA.**

**PATLOLLA ANITA, PHILEMON KIRUI AND PAUL TCHOUNWOU.** Histopathological evaluation of different organs of mice exposed to single-walled carbon nanotube. **11th RCMI International Symposium on Health Disparities. December 1 – 4, 2008, Honolulu, Hawaii, USA.**

**BRIONNA KNIGHTEN, PATLOLLA ANITA, and TCHOUNWOU PAUL.** Serum amino-transferases and alkaline phosphatases as biomarkers of carbon nanotube-induced hepatotoxicity in Swiss-Webster mice. **2008 HBCU-UP National Research Conference October 23-26, 2008, Atlanta, Georgia**

**PATLOLLA ANITA, CLARK KIRBIE, TCHOUNWOU PAUL AND HARRIS SHYAMALA.** Study of Uterine Cell Proliferation In Female Nulliparous Mice with An Overexpression of Progesterone Receptor B. **5<sup>th</sup> International Symposium on Recent Advances in Environmental Research, Sept 14 -17, 2008, Jackson, Mississippi, USA.**

**PATLOLLA ANITA, JOHN SCHALAGAR, SABER HUSSAIN and TCHOUNWOU PAUL.** Cytogenetic evaluation of multiwalled carbon nanotube toxicity in bone marrow cells of Swiss-Webster

mice. 5<sup>th</sup> International Symposium on Recent Advances in Environmental Research, **Sept 14 -17, 2008**, Jackson, Mississippi, USA.

**PATLOLLA ANITA**, PAMELA MOORE and TCHOUNWOU PAUL. DNA damaging effect of malathion in peripheral blood leucocytes of Sprague-Dawley rats. Annual Meeting of the American Association for Cancer Research, **April 12 -16, 2008**, San Diego, CA.

**PATLOLLA ANITA**, BRIONNA KNIGHTEN and TCHOUNWOU PAUL. Study of hepatotoxicity biomarkers in carbon nanotube-induced Swiss-Webster mice. 47<sup>th</sup> Annual Meeting of the Society of Toxicology. **Mar 16-20, 2008**, Seattle, Washington USA.

**PATLOLLA ANITA**, DONEE' McALLISTER and TCHOUNWOU PAUL. Serum lactate dehydrogenase [LDH] and Bilirubin [direct] as biomarkers of arsenic trioxide induced hepatotoxicity in Sprague-Dawley rats. SEVENTY-SECOND ANNUAL MEETING, **February 20-22, 2008**, Olive Branch, MS.

CONSTANCE P. BARNES, LUIS A. MARTINEZ, OBELIA Y. NGALA BONGMBA, **ANITA PATLOLLA**, MARIA V. TEJADA-SIMON. Preliminary characterization of a newly developed RAC deficient mouse. **ABRCMS, Nov 7-10, 2007**, Austin TX.

**PATLOLLA ANITA** and TCHOUNWOU PAUL. Multiwalled carbon nanotube induces cytotoxicity, genotoxicity and apoptosis in normal human fibroblast cells. 38<sup>th</sup> Annual Meeting of Environmental Mutagen Society, **Oct 20- 24, 2007**, Atlanta, GA.

**PATLOLLA ANITA**, PAMELA MOORE and TCHOUNWOU PAUL. Cytogenetic evaluation of malathion toxicity in bone marrow cells of Sprague-Dawley rats. 4<sup>th</sup> International Symposium on Recent Advances in Environmental Research, **Sept 16 -19, 2007**, Jackson, Mississippi, USA.

**PATLOLLA ANITA**, BRIONNA KNIGHTEN and TCHOUNWOU PAUL. Serum amino-transferases as biomarkers of carbon nanotube-induced hepatotoxicity in Swiss-Webster Mice. 4<sup>th</sup> International Symposium on Recent Advances in Environmental Research, **Sept 16 -19, 2007**, Jackson, Mississippi, USA.

**PATLOLLA ANITA**, DONEE McALLISTER and TCHOUNWOU PAUL. DNA damaging effect of potassium dichromate in peripheral blood leucocytes of Sprague-Dawley rats. Annual Meeting of the American Association for Cancer Research, **April 14 -18, 2007**, Los Angeles, CA.