

## Curriculum Vitae

**NAME:** **Erica Kinney Cassimere, Ph.D.**  
New Science Bldg. Room 203H  
Texas Southern University  
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Houston, TX 77004  
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Cassimereek@tsu.edu

**EDUCATION:** **B.S. Biology**  
University of Maryland-Eastern Shore, MD (2001)  
Graduated *Summa cum laude*

**Ph.D. Medicinal Chemistry & Molecular Pharmacology**  
Purdue University, West Lafayette, IN (2008)  
Mentor: Dr. Daitoku Sakamuro  
Project: The role of the Bin1 tumor suppressor in E2F1-mediated apoptosis in response to DNA damage

**POSTGRADUATE TRAINING:** **Postdoctoral Research Fellow (2009-2013)**  
University of Texas Health Science Center-Houston  
Dept. of Integrative Biology & Pharmacology  
Mentor: Dr. Catherine Denicourt  
Project: The role of p27<sup>kip1</sup> in the DNA damage response

### TEACHING EXPERIENCE:

#### **Visiting Assistant Professor-Texas Southern University (August 2014-present)**

- Designed course syllabi and experiments for introductory Biology lab and Cell Biology lab
- Instructor for General Biology and Cell Biology courses
- Served as coordinator for introductory biology labs

#### **Adjunct Professor of Biology-Texas Southern University (August 2013-July 2014)**

- Designed course syllabus for introductory biology course
- Served as instructor for two courses
- Organized lectures using visual presentation and study guides

**Sunday School Teacher-Wheeler Avenue Baptist Church (October 2012-present)**

- Generated weekly lesson plans for 5<sup>th</sup> grade class
- Implemented additional visuals and demonstrations to enhance learning

**Instructor-Presentation Skills Course for UT Postdoctoral Certification Program (Fall 2010), University of Texas Health Science Center-Houston**

- Designed evaluations to judge oral presentations for a class of 10 students
- Engaged students in critical discussions to improve presentation skills
- Re-evaluated presentations to assess overall improvement

**Judge- Research Poster Competition Graduation Student Education Committee (Feb 2010), University of Texas Health Science Center-Houston**

**Graduate student/undergraduate mentor- Purdue University, IN (2002-2007)**

- Assisted 2 undergraduate, 3 graduate, and 3 summer students in the laboratory of Dr. Daitoku Sakamuro
- Demonstrated hands-on cellular and molecular biology laboratory techniques for given research projects
- Evaluated completion of experiments and provided troubleshooting techniques when appropriate
- Helped students to effectively organize lab notebooks
- Assisted in design of oral presentation at the end of student's term

**Youth Leader-Second Baptist Church, Lafayette, IN (2003-2004)**

- Established weekly tutoring program for middle and high school students
- Coordinated 1<sup>st</sup> Annual Youth Carnival and provided expertise for subsequent community events due to its widespread success
- Assisted in Sunday School class for elementary school children

**Tutor- General Biology 101- University of Maryland Eastern Shore (Fall 2000)**

- Provided assistance to 5 students to aid in success of weekly quizzes

**RESEARCH EXPERIENCE:**

**Postdoctoral Fellow**, Catherine Denicourt (Mentor), Department of Integrative Biology and Pharmacology, University of Texas Health Science Center-Houston, TX (2009-2013)

**Graduate Research Assistant**, Daitoku Sakamuro, Ph.D. (Thesis advisor), Department of Pathology, Louisiana State University Health Sciences Center, New Orleans, LA (2002-2008)

**Research Intern**, Dennis Taub, Ph.D. (Mentor), Department of Immunology, National Institute on Aging, Baltimore, MD (Summer 2001)

**Research Intern**, Abhay Satoskar, Ph.D. (Mentor), Department of Microbiology, Ohio State University, Columbus OH (Summer 2000)

**Research Intern**, Prabhu Reddi, Ph.D., Department of Pathology (Mentor), University of Virginia, Charlottesville, VA (Summer 1998)

**FELLOWSHIPS:**

Susan G. Komen Postdoctoral Fellowship (2010-2013)

National Institutes of Health (F31) Ruth L. Kirshstein Pre-Doctoral Fellowship (2004-2007)

Purdue University Pre-Doctoral Fellowship (2002-2004)

Bowen Minority Fellowship (2001-2002)

**PUBLICATIONS:**

Kumari A, Iwasaki T, Pyndiah S, **Cassimere EK**, Palani CD, Sakamuro D. Regulation of E2F1-induced apoptosis by poly(ADP-ribosyl)ation. *Cell Death and Differentiation* (2015) 22(2) 311-322

Castle CD, **Cassimere EK**, and Denicourt C. Las1L interacts with the mammalian Rix1 complex to regulate ribosome biogenesis. *Molecular and Cellular Biology* (2012) 23:716-728

Lundgaard G.L., Daniels N.E., Pyndiah S., **Cassimere E.K.**, Ahmed K.M., Rodrigue A., Kihara D., Post C.B., Sakamuro D. Identification of a novel effector domain of BIN1 required for cancer suppression. *Journal of Cellular Biochemistry*. (2011); 112(10):2992-3001

Pyndiah S., Tanida S., Ahmed K.M., **Cassimere E.K.**, Choe C., and Sakamuro D. c-Myc suppresses BIN1 to release Poly(ADP-Ribose) Polymerase1: A mechanism by which cancer cells acquire cisplatin resistance. *Science Signaling* (2011); (166):ra19

Castle C.D, **Cassimere E.K.**, Lee J. and Denicourt C. Las1L is a nucleolar protein involved in ribosome biogenesis. *Molecular and Cellular Biology* (2010); 30(18): 4404-4414

**Cassimere E.K.**, Pyndiah S. and Sakamuro D. The c-Myc-interacting pro-apoptotic tumor suppressor BIN1 is a transcriptional target for E2F1 in response to DNA damage. *Cell Death and Differentiation* (2009) 16(12):1641-1653

**Kinney, E.L.**, Tanida, S., Rodrigue, A.A., Johnson, J.K., Tompkins, V.S. and Sakamuro, D. Adenovirus E1A oncoprotein liberates c-Myc activity to promote cell proliferation through abating Bin1 expression via Rb inactivation. *Journal of Cellular Physiology* (2008) 216(3): 621-631

## **HONORS AND AWARDS:**

AACR Minorities in Cancer Research Travel Award (2004)  
National Dean's List, Purdue University (2001-2002)  
Minority Access to Research Careers Undergraduate  
Student Training in Academic Research (MARC U\*STAR) Scholar (2000-2001)  
2nd Place, Undergraduate Research Symposium in Biological and Chemical Sciences,  
University of Maryland Baltimore County (2000)  
University of Maryland Eastern Shore Honors Program (1998-2001)

## **AFFILIATIONS:**

American Association for Cancer Research (AACR)  
National Postdoctoral Association (2009-2013)  
University of Texas Health Science Center-Houston Postdoctoral Association (2009-2013)

## **RESEARCH SKILLS:**

**Cell-Based Assays:** Mammalian cell (including stem cell) culture, eukaryotic gene transfection, siRNA transfection, shRNA lentiviral infection, retroviral-mediated gene transfer, colony formation assays, BrdU labeling, Fluorescent activated cell sorted (FACS) analysis, immunofluorescence, apoptosis assays, cell migration assay

**Biochemical Assays:** Restriction endonuclease digestion, DNA sub-cloning, agarose gel electrophoresis, bacterial transformation, luciferase reporter assays, genomic DNA isolation, RNA isolation, qualitative and quantitative reverse transcriptase polymerase chain reaction (qRT-PCR), Chromatin Immunoprecipitation assay (ChIP), Western immunoblotting, Comet DNA damage assay, Radioresistant DNA synthesis (RDS) assay

**Computer-based proficiencies:** Adobe Photoshop and Illustrator, FlowJo and FACS Diva flow cytometric analysis software, Microsoft Word, Excel and PowerPoint

## **PRESENTATIONS**

**Cassimere, EK.** and Denicourt C. (2013) "Role of p27kip1 in radioresistance of breast cancer stem cells," University of Texas Health Science Center Cellular and Regulatory Biology Retreat, Hempstead, TX.

**Cassimere, E.K.** and Denicourt C. (2009) “Identification of Novel p27<sup>kip1</sup>- Interacting Proteins in Breast Carcinoma Cells,” University of Texas Health Science Center Cellular and Regulatory Biology Retreat, Hempstead, TX.

**Kinney, E.L.** and Sakamuro, D. (2004) “Role of Bin1 in E2F1-Dependent Apoptosis in Prostate Cancer Cell Lines,” American Association for Cancer Research (AACR) Special Conference “Cell Cycle and Cancer”, Fort Lauderdale, FL.

**Kinney, E.L.** and Sakamuro, D. (2004) “Role of Bin1 in E2F1-Dependent Apoptosis in Prostate Cancer Cell Lines,” Indiana University Cancer Research Symposium, Indianapolis, IN.

**Kinney, E.L.**, Ahmed, K.M., and Sakamuro, D. (2003), “Possible Role of Bin1 in Starvation Stress-Associated Growth Arrest in Androgen-Independent Prostate Cancer Cell Line DU145,” Purdue Cancer Center Annual Retreat, West Lafayette, IN.

**Kinney, E.L.** and Sakamuro, D. (2003) “Role of Bin1 in E2F1-Dependent Apoptosis in Prostate Cancer Cell Lines,” Walther Cancer Institute Scientific Retreat, West Lafayette, IN.

**Kinney, E.L.**, Kalehua, A., and Taub, D. (2001), “The Biological and Molecular Effects of D, L-Homocysteine on Human T Lymphocytes,” National Institute on Aging Poster Session, Baltimore, MD.

**Kinney, E.L.** and Satoskar, A. (2000) “Immunological Basis of Differential Susceptibility of Inbred Mice to *L. major* and *L. mexicana*,” 3rd Annual Undergraduate Research Symposium in Biological and Chemical Sciences, Baltimore, MD.

**Kinney, E.L.** and Satoskar, A. (2000) “Immunological Basis of Differential Susceptibility of Inbred Mice to *L. major* and *L. mexicana*,” National Minority Research Symposium, Washington, DC.