

NISSIA M. ABRAHAM

Nissia1@gmail.com

EDUCATION

Ph.D. in Environmental Toxicology, Texas Southern University, Houston, TX - 2018

Dissertation: *"Effect of Zoledronic Acid the Transcriptome of Cell Lines Representing Triple Negative Compared and Luminal Breast Cancer"*

M.S in Biology, Texas Southern University, Houston, TX - 2012

Thesis: *"The Molecular Phylogeny of Ascomycota and other Fungi Based on the Mitochondrial Cytochrome-B Gene"*

B.S. in Biology, Texas Southern University, Houston, TX - 2009

B.S. in Biology with minor in Chemistry
Graduated Magna Cum Laude

B.S in Botany, Kerala University, Kerala, India - March 1997

B.S in Botany with minor in Chemistry and Zoology

PROFESSIONAL EXPERIENCE IN TEACHING

Houston Community College, Houston, TX - Fall 2019-present

Adjunct Professor – Biology department

- Courses teaching
 - BIOL 1306 General Biology I
 - BIOL 2402 Human Anatomy & Physiology II

Texas Southern University, Houston, TX - 2009-2018

Instructor – Biology department - ***Fall 2018***

- Course Taught
 - BIOL 135 L & Lecture: Human A&P 1 for nursing majors
 - BIOL 136L: Human A&P II for nursing majors
 - BIOL 245L: Human Anatomy and Physiology I
 - BIOL 246L: Human Anatomy and Physiology II
 - BIO 112L: Biological Science Lab II
 - BIO 341L: Organismic Biology
 - BIO 345L Ecology
 - BIOL 347L: Microbiology
- Anatomy and Physiology course one regulator 16 weeks class and one fast track 13 weeks course

- Supervised graduate teaching assistants for Anatomy and Physiology (A&P) I & II lab classes for nursing students.
- Created syllabus for these courses, inventory for the lab experience, guide them to apply for different nursing programs
- Make exams, submitted grades in Blackboard and in “TSU MYWEB” in timely manner.

Teaching Assistant for Biology department - 2009-2018

- Teaching 6 different lab courses throughout these years

Tutor for Student Support center - 2009

- Tutor for college level students in advanced Biology, Chemistry (general to quantitative analysis), Physics, and Math (basic algebra to trigonometry).
- Assessed students within program to identify learning comprehension, and providing focused solutions

TSU Summer Scholar’s Academy: Instructor, Houston, TX - Summer 2018

Instructor- Anatomy and Physiology course for female students in grade 8-12.

- Developed and implemented daily lesson plans for the class
- Conducted group and individual science related activities.
- Fostered a classroom environment conducive to learning and promoting excellent student/teacher interaction.
- More than 100 students were in the camp and divide in to 3 sections in each day.
- To perform fetal pig and frog dissection, blood testing, demonstrate how to take vital science, and explaining the Anatomical models.

Urban Schools Collaborative Biomedical Summer Scholars Academy, Houston, TX - Summer 20018

Instructor - Anatomy and Physiology course for primary and secondary students.

- Helped students explore their creativity through interactive anatomy and physiology labs.
- Managed a classroom environment conducive to learning and promoting excellent student/teacher interaction.
- Accompanied participants on field trips and planned educational outings excursions.

Wharton County Junior College, Sugar Land, TX- 08/2013 – 05/2018

Adjunct Professor – Biology department

- Course Taught
 - BIOL 1406 General Biology I
 - BIOL 1407 General Biology II
 - BIOL 1322 Nutrition
 - BIOL 2401 Human Anatomy & Physiology I
 - BIOL 2402 Human Anatomy & Physiology II
- Communicated through Blackboard and provides supplemental assignments through publisher required website for textbook and course.

- Completed all necessary and assigned paperwork in timely manner
- Maintained attendance rosters and progress reports.
- Performed other duties as assigned by the department like attend the personal development meetings, blackboard or technical training, faculty meetings, and provide office hours for the students.

San Jacinto College, Houston, TX - 08/2013 - 5/2015; 08/2020- present

Adjunct professor – Biology department

- Courses Taught
 - BIOL 1408 Biology Non-Sci Majors 1 **online course/ Dual credit students**
 - BIOL 1406 General Biology 1
- Use course syllabus for each section based on institutional and departmental guidelines
- Maintained professional relationships with students and colleagues.
- Provided timely, quality access to students via electronic communication for online course

PROFESSIONAL EXPERIENCE IN RESEARCH

Texas Southern University, HOUSTON, TX- 2010-2018

Research Assistant

- Dissertation title: “EFFECT OF ZOLEDRONIC ACID ON TRANSCRIPTOME OF CELL LINES REPRESENTING TRIPLE NEGATIVE COMPARED WITH LUMINAL BREAST CANCER”
Used MTT assay, Microarray analysis, and performed PCR and Western blot to validate the microarray result.
- Received TSU Title III ETOX Fellowship 2014- 2017
- Researched finding the gene expression on triple negative breast cancer cell lines.
- Studied the “Identification of candidate genes associated with triple negative breast cancer”
- Our lab focus is to continue analyses of TNBC, and also identify genes that might distinguish TNBC from normal and other breast cancer types. We ultimately selected six genes for study including IL32, PTX3, GATA3, ETS1, TMEM158 and MYBL1.
- Methods: Immunohistochemistry analysis, PCR, MTT assays, Microarray analysis, Bioinformatics, performed PCR and Western blot to validate the microarray result.
- Mentored undergraduate and graduate students in the lab

Diagnostic Clinic of Houston, Houston, TX - 08/2012 - 12/2012

Clinical research coordinator

- Prescreened over 600 patients for 5 different studies in phase 2 and 3
- Identified eligible subjects to for clinical trials
- Worked with industry leaders such as Pfizer, Icon, Coronado and Merck
- Participated in investigators meetings for advancement of trials

NASA Group 4 URC- NNX10AQ16A, Houston, TX - 2010-2012

Student Researcher

- Title: Center for Bio-nanotechnology and Environmental Research

- Volunteered for collaborative project between Texas Southern University and NASA
- Researched fungi genomes pertaining to the study known as: “TESTING THE EVOLUTIONARY POSITION OF CHAETOMELLA AND PILIDIUM BASED ON THE MITOCHONDRIAL CYTOCHROME B GENE”
- DNA analysis, PCR, Bioinformatics

PUBLICATIONS

- **Abraham, N.**, Hollomon M., Player A., (2019). *EFFECT OF ZOLEDRONIC ACID ON cell cycle related genes in MDA MB231 and MCF7 cell lines. Cancer Report and Reviews*, doi: 10.15761/CRR.1000189
- **Abraham, N. (2018)**. *EFFECT OF ZOLEDRONIC ACID ON TRANSCRIPTOME OF CELL LINES REPRESENTING TRIPLE NEGATIVE COMPARED WITH LUMINAL* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Publication Number: 10980058)
- Larkins T, Tavera G, **Abraham N**, Player A. (2018) Identification of genes differentially expressed with cMYB in luminal breast cancers. *Journal of Clinical and Molecular medicine*, doi: 10.15761/JCMM.1000121
- Player, A., **Abraham, N.**, Burrell, K., Bengone, I., Harris, A., Nunez, L., ... Williams, T. (2017). Identification of candidate genes associated with triple negative breast cancer. *Genes and Cancer*, 8(7-8), 659-672. Doi: 10.18632/genesandcancer.147
- **Abraham, N.**, Kwende, S., Player, A. (2017). Identification of genes differentially associated with triple negative breast cancer. *ARC Journal of Cancer Science*.

PRESENTATION

- South-Central SETAC (Society of Environmental Toxicology and Chemistry) April 2017 “Effect of Zoledronic Acid the transcriptome of cell lines representing triple negative compared and luminal breast cancer”
- Environmental Toxicology Program Seminar Series April 2017 “Effect of Zoledronic Acid on Genes in a Subpopulation of Triple Negative Breast Cancers”
- TSU Research Week Spring 2017, “Effect of Zoledronic Acid on Genes in a Subpopulation of Triple Negative Breast Cancers”
- TSU Research Week Spring 2016, “Effect of Zoledronic acid the transcriptome of cell lines representing triple negative compared and luminal breast cancer”
- Developed and presented poster for TSU Research Week Spring 2012, “Molecular Phylogeny of Ascomycota and other Fungi Based on the Mitochondrial Cytochrome B Gene Region”

AWARDS

- COSET Scholarship awarded received 2016 & 17
- Recipient of Joseph & Lori Flowers Partner- Sponsored Scholarship 2010

- **Most Outstanding Tutor award** from TSU Student Support Service Program April 21, 2010
- Highest Cumulative G.P.A award from TSU Student Support Program April 21, 2010
- Graduated Magna Cum Laude Honor from TSU COSET 2009
- Highest Cumulative G.P.A Runner up Award from TSU student support program April 22, 2009

VOLUNTEER WORK

- Science fair judge for International Sustainable World (Energy, Engineering & Environment) Project Olympiad May 2017
- American cancer society
- Harvey Rebuilding and Recovery with Girls scout Troop #19351, Houston, TX, 2018
- Houston Food bank
- Creating and organizing first children's church 2009 and teaching Sunday school 2008 - 2016 at Christian Assembly of Houston
- Volunteer as parent liaison for Fort Bend ISD Language Proficiency Assessment Committee (LPAC) 2013-2016
- Houston Science Workshop: Teacher to Teacher - Pearson Education University of Houston October 2014.

MEMBERSHIP AND CERTIFICATIONS

- ETID 1302- EdTech: Academic Learning at San Jacinto College, November 2020
- TL1620 HCC Online Learning Certificate April 30,2020
- HCC Adjunct Academy April 17,2020
- TL 1900 orientation to Distance Education
- TL 1700 Copyright Literacy in the Academic Environment
- TL 1000 Learner Centered Instructional Design
- TL2075 improving Student Learning Through Active Engagement
- Canvas instructor overview course
- Association for women in Science (AWIS) Membership 2020
- Society of Environmental Toxicology and Chemistry (SETAC) regional membership
- The Galveston County Regional Collaborative for excellence in Science Teaching UTMB SRT-STEM center 09/12/2014
- OC-RDC Onsite Data Entry
- ORACLE CERTICATES
- NIH –Protecting Human Research Participants
- P.A.C.E- Transporting Dangerous Goods
- CITI Collaborative Institutional Training Initiative
- Texas Pharmacy technician certification