

Curriculum Vitae

Octaviano James Beltran III
Kingsville Independent School District
2200 South Brahma Blvd.
Kingsville, TX 78363
Work Phone: (361) 595-8600, ext. 6436
Cellular Phone: (361) 455-5426
E-mail: jbeltran@kingsvilleisd.com

Education:

H.M. King High School-Kingsville, TX

- ✓ Enrolled 1989-1993
- ✓ Honors Graduate (top 10% of class)

University of Texas-Austin, TX

- ✓ Enrolled 1993-1994 & 1998-2000 (part-time)
- ✓ Dean's List (1993 & 1994)

University of Texas Medical Branch-Galveston, TX

- ✓ Summer Undergraduate Research Program, Summer 2002

Texas A&M University-Kingsville-Kingsville, TX

- ✓ Enrolled 1994-1997 & 2001-2003
- ✓ Cum Laude Graduate- 3.364 GPA
- ✓ Bachelor of Science in Biology, Chemistry Minor, May 2003

Texas A&M University-Kingsville-Kingsville, TX

- ✓ Enrolled 2003-2005
- ✓ Honors Graduate - 4.00 GPA
- ✓ Master of Science in Biology, 2005

Baylor College of Medicine-Houston, TX

- ✓ Enrolled 2005-2006
- ✓ 78 credit hours earned
- ✓ Pre-doctoral candidate in Molecular & Human Genetics

Texas A&M University-Kingsville- Kingsville, TX

- ✓ Enrolled 2007-2012
- ✓ 58 hours earned
- ✓ Master of Science in Education Administration, principal certification

Texas A&M University-Kingsville- Kingsville, TX

- ✓ Enrolled 2012-Current
- ✓ 21 hours earned
- ✓ Doctorate in Education Leadership, Superintendent – Curriculum & Instruction (pending)

Extracurricular Activities:

- ✓ Graduate Biology Students' Association- member: 2 years
- ✓ Graduate Biology Students' Association- Vice President: 1 year
- ✓ Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)- member: 2 years
- ✓ Texas Academy of Science (TAS)- member: 1 year
- ✓ Sigma Xi Scientific Society - member: 5 years
- ✓ American Physiological Society (APS) - member: 1 year
- ✓ Genetics Society of America (GSA)- member: 2 year
- ✓ American Society for Pharmacology and Experimental Therapeutics (ASPET)- member: 1 year
- ✓ Kingsville ISD Annual Science Fair- Judge: 5 years
- ✓ Bishop CISD Annual Science Fair- Judge: 1 year
- ✓ Softball, tennis & golf
- ✓ H.M. King Marching Band Faculty Sponsor- 5 years
- ✓ KISD Academic Club Faculty Sponsor- 1 year
- ✓ KISD Team One Leadership Group Member- 2 years
- ✓ H.M. King National Honor Society Assistant Faculty Sponsor- 3 years
- ✓ KISD District Advisory Committee Member- 2 years
- ✓ KISD Organizational Health Team Member- 2 years
- ✓ KISD Instructional Leadership Team Member- 3 years
- ✓ TAMUK Institutional Biosafety Committee Member- 3 years

Conferences and Presentations:

- ✓ UTMB SURP Poster Presentation- Galveston, TX: August 23, 2002
- ✓ SACNAS Annual Conference- Austin, TX: October 21-24, 2004
- ✓ Texas Academy of Science Conference- Edinburgh, TX: March 3-5, 2005
- ✓ 46th Annual Drosophila Research Conference-San Diego, CA: March 30 - April 3, 2005
- ✓ XXXV International Congress of Physiological Sciences/Experimental Biology Conference - San Diego, CA: March 31-April 5, 2005
- ✓ AVID Summer Institute – Dallas, TX: June 27 – July 1, 2011
- ✓ Learning Forward Summer Conference – Indianapolis, IN: July 16 -20, 2011
- ✓ Texas Assessment Conference – Austin, TX: December 4-7, 2011
- ✓ Learning Forward Summer Conference – Denver, CO: July 22 -24, 2012
- ✓ Texas Assessment Conference – Austin, TX: November 27-30, 2012
- ✓ Learning Forward Summer Conference – Minneapolis, MN: July 21 -23, 2013
- ✓ CSCOPE Summer Conference – San Antonio, TX: August 6-8, 2013
- ✓ Advancing Improvement in Education Conference – Austin, TX: 24-26, 2013
- ✓ Advancing Improvement in Education Conference – Austin, TX: September 23-25, 2014

Special Awards and Honors:

- ✓ Cum Laude Graduate with Honors: 91.56 GPA- H.M. King High School
- ✓ National Honor Society- 2 years
- ✓ UTMB SURP Fellowship
- ✓ UTMB SURP Scholarship
- ✓ Cum Laude Graduate with Honors: 3.364 GPA- TAMUK (Bachelor's)
- ✓ UNT-Health Science Center Bridges to A Doctoral Degree Fellowship
- ✓ UTMB Bridges to A Doctoral Degree Fellowship
- ✓ Honors Graduate: 4.00 GPA-TAMUK (Master's)

- ✓ Baylor College of Medicine, Department of Molecular and Human Genetics Doctoral Fellowship
- ✓ NIH Initiative for Minority Student Development (IMSD) Training Grant
- ✓ NASA SimAero Modeling & Simulation STEM Unit Plan Award

Recent Work Experience:

- ✓ Fall 2014 – Current, District Dean of Instruction for Science (KISD)
- ✓ Spring 2013 – Fall 2014, Dean of Instruction - Gillett Intermediate (KISD)
- ✓ Spring 2012 - Fall 2013, Adjunct Professor of Genetics – TAMUK
- ✓ Spring 2010 – Fall 2014, Science Curriculum Specialist/Instructional Coach - H.M. King (KISD)
- ✓ Spring 2007-Spring 2010, High School Science Educator- H.M. King (KISD)
- ✓ Summer 2006-Fall 2006, Pre-doctoral Fellow- Dr. Scott Pletcher (HCOA)
- ✓ Fall 2005-Spring 2006, Pre-doctoral Fellow (Rotations)- Drs. William Craigen, Paul Overbeek, Graeme Mardon, Milan Jamrich & Si-Yi Chen
- ✓ Fall 2002-Spring 2004, Lab Teaching Assistant- TAMUK
- ✓ Fall 2002-Summer 2005, Lab Technician- Dr. Enrique Massa, TAMUK Summer 2002, Lab Technician- Dr. Sankar Mitra, UTMB
- ✓ Fall 1997-Summer 2001, Auditor/Guest Services Clerk/Assistant Manager- Holiday Inn Express Austin
- ✓ Summer 1994-Summer 1997, Chef/Server/Assistant Manager- Denny's Restaurants
- ✓ Fall 1993-Spring 1994, Intramural Sports Umpire/Referee- UT-Austin, main campus

Research Experience:

- ✓ Summer Undergraduate Research Program (SURP) under Sankar Mitra, Ph.D.
 - During the course of the term, I conducted extensive research on a newly identified human protein named NEIL2. NEIL2 has a weight of 37 kDa and functions as a DNA glycosylase I AP lyase in the base excision repair (BER) pathway of DNA repair. My time was spent attempting to confirm the presence and necessity of a sequence-identified zinc finger motif in NEIL2, to discover the lesion preferences of the protein and to ascertain any broad-range implications that can result from modifications to this motif.
- ✓ Master of Science Candidate studies under Enrique Massa, Ph.D.
 - I have completed a study of the transcriptional regulation of the *Drosophila melanogaster* KCNQ gene. Two putative promoter regions have been identified that regulate three distinct transcriptional start sites. Using a GAL4/UAS system in transgenic flies, I have ascertained preliminary, but strongly conclusive data as to the spatial and temporal expression patterns of the gene's promoters in developing *Drosophila*.
- ✓ Pre-doctoral Lab Rotations under several leading Principle Investigators
 - I have completed laboratory rotations in six biomedical research laboratories conducting research into topics as diverse as genetic diseases of mitochondrial components leading to metabolic disorders to understanding the molecular mechanisms underlying neural development to training of immune system antigen- presenting cells as a means of vaccination against viruses & antibiotic-resistant bacteria. Each rotation required considerable understanding of the background subject material as well as the ability to perform genetic and molecular manipulations of model organisms as a means to further the attainment of knowledge.
- ✓ Pre-doctoral Candidate studies under Scott Pletcher, Ph.D. (HCOA)

- Work in this lab includes elucidating the connections between metabolic & innate immunity pathways and how signaling through these pathways affects/is affected by aging. Current work consists primarily of background reading & preparation of a thesis proposal to be conducted over the course of the next few years.

Special Skills:

- ✓ Fenwick English Curriculum Audit® - Level I certified
- ✓ AVID Science - Level II certified
- ✓ Preparation & maintenance of various research reagents (chemical & biological)
- ✓ Preparation & completion of relevant molecular genetic protocols
- ✓ Dissection of Drosophila larval and adult animals & Xenopus and mouse embryonic & adult animals
- ✓ Tissue sectioning & staining (slide preparation & expression analysis)
- ✓ Polymerase Chain Reaction (standard, hybrid, two-sided & RT procedures)
- ✓ Generation of cDNA libraries
- ✓ Agarose and Polyacrylamide Gel Electrophoresis
- ✓ Southern, Western & Northern Blotting
- ✓ DNA isolation by gel extraction & "Death Wish" procedures
- ✓ Total cellular RNA & mRNA isolation
- ✓ Inducible transcription systems
- ✓ Subcloning of DNA fragments
- ✓ Small and medium scale plasmid preparation
- ✓ Restriction Mapping
- ✓ DNA sequence analysis
- ✓ DNA quantification via mass spectrometer and fluorescence imaging
- ✓ Computerized agarose and polyacrylamide gel documentation
- ✓ Computerized microscope and fluorescence-capable stereoscope image documentation
- ✓ Enzyme Activity Assays (pull-downs and enhancer traps)
- ✓ Lyophilizer equipment usage
- ✓ ELISA Assay
- ✓ Drosophila transgenic expression systems (constitutive & inducible)
- ✓ Recombinant protein expression
- ✓ Protein isolation & purification
- ✓ Radio-labeled enzyme activity assays
- ✓ Fly food preparation
- ✓ Maintenance and animal husbandry of Drosophila, Xenopus & Mus musculus.
- ✓ Drosophila gene mutagenesis | rescue transgenesis techniques
- ✓ Xenopus morpholino design & knock-down procedures
- ✓ Drosophila S2 cell culture & transfection
- ✓ Mammalian cell culture & transfection
- ✓ FACS cell sorter equipment usage
- ✓ Biochemical analysis of metabolic, immunity & developmental proteins/hormones
- ✓ Statistical analysis of genomic & biochemical data sets

Software Utilized:

- ✓ Microsoft Office 10 applications (Word, Excel, PowerPoint, etc.)
- ✓ Performance PLUS data analysis suite
- ✓ MacVector 9.0

- ✓ Vector NTI Advance
- ✓ Adobe Creative Suite applications (Photoshop, Acrobat, etc.)
- ✓ iWork applications (iTunes, iPhoto, iMovie, etc.)
- ✓ Internet Explorer, Netscape & Safari internet browsers
- ✓ NCBI website, databases & BLAST genomic analysis software
- ✓ Mac OS X (ver. 10.4.11)
- ✓ Microsoft Windows 7 Professional