

# ELIZABETH ALICE BONNER

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## EDUCATION

### University of Denver

*BS Molecular Biology, Minors: Mathematics, Chemistry*

Concentration: Neuroscience

Denver, CO

2015

## RESEARCH EXPERIENCE

### University of Colorado

PI: Joaquin Espinosa

Aurora, CO

2015-Present

- Hypoxia and its regulatory responses in colorectal carcinoma
  - Studied genetic expression of hypoxia inducible genes in HCT116 cells in absence of Mediator complexes Med13 and Med13L
  - Searched for conditions that would result in cell proliferation defects resulting from glucose, glutamine, and oxygen limitation in colorectal carcinoma
  - Studied cell proliferation, oncogenicity and genetic expression of glycolytic functions in CDK8 addicted and CDK8 kinase deficient colorectal carcinoma
- Regulation of PUMA translation in respects to antisense intragenic translation
  - Screened cell lines via native PAGE with PUMA antisense transcript knock out
  - Performed strand specific reverse transcriptase PCR and qRT-PCR to determine affects of CRISPR mediated knock-outs on p53 target genes
  - Analyzed Sanger sequencing for determination of genetic editing

## PEER REVIEWED PAPERS

Coauthor, "The TIP60 Complex Is a Conserved Coactivator of HIF1A". *Cell Reports*. 16: 37-47. 2016

Coauthor, "CDK8 Kinase Activity Promotes Glycolysis". *Cell Reports*. 21: 1-12. 2017

## AWARDS AND HONORS

- Delta Epsilon Iota Academic Honors Society, 2014
- Pikes Peak Scholarship, 2012
- Phi Theta Kappa Academic Honors Society, 2011

## SKILLS AND QUALIFICATIONS

- Microsoft Word, PowerPoint, Microsoft Excel, Prism, SnapGene, ChemsSketch
- TA and Restriction enzyme cloning
- Nucleic acid and protein purification
- qRT-PCR, PCR, gel electrophoresis, Western Blot, native PAGE
- Mammalian tissue culture, SRB, soft agar colony formation assay
- Mammalian tissue transduction and transfection