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| **Affiliation:** **Address:** **Contact:** |  |

**Narrative**

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| *Areas of interest:*  *-Cancer Genomics: Transcriptomes, Somatic Mutations and SNPs Associated with Cancer Risk*  *-Biomarker Development*  *-Transcriptional Regulatory Networks*  *-Chromatin/Epigenetics/Nuclear Architecture*  *Affiliated with the following Center for Cancer Research and Therapeutic Development (CCRTD) Facilities:*  *-Prostate Cancer Tissue and Fluid Biorepository Core*  *-Genomics and Bioinformatics/Next Generation Sequencing Core* |

**Other Positions**

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| **Title** | *Member* |
| **Institution** | *International Society of Genetic Genealogy (ISOGG)* |
| **Department** | *http://www.isogg.org* |
| **Division** |  |
| **Title** | *Faculty Member* |
| **Institution** | *PanAmerican Bioinformatics Institute* |
| **Department** | *http://panambioinfo.biology.gatech.edu/* |
| **Division** |  |

**Awards and Honors**

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| **2000** | **2002** | *NICHD - NIH Postdoctoral IRTA* |
| **2002** |  | *UGA - Georgia Cancer Coalition Scholar* |

**Publications**

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|  |  |  |
| **1.** | *Dougan J, Hawsawi O, Burton LJ, Edwards G, Jones K, Zou J, Nagappan P, Wang G, Zhang Q, Danaher A, Bowen N, Hinton C, Odero-Marah VA. Proteomics-Metabolomics Combined Approach Identifies Peroxidasin as a Protector against Metabolic and Oxidative Stress in Prostate Cancer. Int J Mol Sci. 2019 Jun 21; 20(12).* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/31234468) |
| **2.** | *Burton LJ, Hawsawi O, Sweeney J, Bowen N, Hudson T, Odero-Marah V. CCAAT-displacement protein/cut homeobox transcription factor (CUX1) represses estrogen receptor-alpha (ER-a) in triple-negative breast cancer cells and can be antagonized by muscadine grape skin extract (MSKE). PLoS One. 2019; 14(4):e0214844.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/30964885) |
| **3.** | *Elliott B, Millena AC, Matyunina L, Zhang M, Zou J, Wang G, Zhang Q, Bowen N, Eaton V, Webb G, Thompson S, McDonald J, Khan S. Essential role of JunD in cell proliferation is mediated via MYC signaling in prostate cancer cells. Cancer Lett. 2019 04 28; 448:155-167.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/30763715) |
| **4.** | *Burton LJ, Hawsawi O, Loyd Q, Henderson V, Howard S, Harlemon M, Ragin C, Roberts R, Bowen N, Gacii A, Odero-Marah V. Association of Epithelial Mesenchymal Transition with prostate and breast health disparities. PLoS One. 2018; 13(9):e0203855.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/30199553) |
| **5.** | *Ryans K, Omosun Y, McKeithen DN, Simoneaux T, Mills CC, Bowen N, Eko FO, Black CM, Igietseme JU, He Q. The immunoregulatory role of alpha enolase in dendritic cell function during Chlamydia infection. BMC Immunol. 2017 05 19; 18(1):27.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/28525970) |
| **6.** | *Sheng X, Bowen N, Wang Z. GLI pathogenesis-related 1 functions as a tumor-suppressor in lung cancer. Mol Cancer. 2016 Mar 18; 15:25.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26988096) |
| **7.** | *Du F, Li Y, Zhang W, Kale SP, McFerrin H, Davenport I, Wang G, Skripnikova E, Li XL, Bowen NJ, McDaniels LB, Meng YX, Polk P, Liu YY, Zhang QJ. Highly and moderately aggressive mouse ovarian cancer cell lines exhibit differential gene expression. Tumour Biol. 2016 Aug; 37(8):11147-11162.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26935058) |
| **8.** | *Pannu V, Rida PC, Ogden A, Turaga RC, Donthamsetty S, Bowen NJ, Rudd K, Gupta MV, Reid MD, Cantuaria G, Walczak CE, Aneja R. HSET overexpression fuels tumor progression via centrosome clustering-independent mechanisms in breast cancer patients. Oncotarget. 2015 Mar 20; 6(8):6076-91.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25788277) |
| **9.** | *Chinaranagari S, Sharma P, Bowen NJ, Chaudhary J. Prostate cancer epigenome. Methods Mol Biol. 2015; 1238:125-40.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25421658) |
| **10.** | *Patel D, Knowell AE, Korang-Yeboah M, Sharma P, Joshi J, Glymph S, Chinaranagari S, Nagappan P, Palaniappan R, Bowen NJ, Chaudhary J. Inhibitor of differentiation 4 (ID4) inactivation promotes de novo steroidogenesis and castration-resistant prostate cancer. Mol Endocrinol. 2014 Aug; 28(8):1239-53.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24921661) |
| **11.** | *Pawar S, Donthamsetty S, Pannu V, Rida P, Ogden A, Bowen N, Osan R, Cantuaria G, Aneja R. KIFCI, a novel putative prognostic biomarker for ovarian adenocarcinomas: delineating protein interaction networks and signaling circuitries. J Ovarian Res. 2014; 7:53.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25028599) |
| **12.** | *Liu Y, Bowen NJ, Matyunina L, McDonald J, Prausnitz MR. Gene transfection enhanced by ultrasound exposure combined with drug treatment guided by gene chip analysis. Int J Hyperthermia. 2012; 28(4):349-61.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/22621736) |
| **13.** | *Wang L, Mezencev R, Bowen NJ, Matyunina LV, McDonald JF. Isolation and characterization of stem-like cells from a human ovarian cancer cell line. Mol Cell Biochem. 2012 Apr; 363(1-2):257-68.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/22160925) |
| **14.** | *Huda A, Tyagi E, Mariño-Ramírez L, Bowen NJ, Jjingo D, Jordan IK. Prediction of transposable element derived enhancers using chromatin modification profiles. PLoS One. 2011; 6(11):e27513.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/22087331) |
| **15.** | *Shahab SW, Matyunina LV, Mezencev R, Walker LD, Bowen NJ, Benigno BB, McDonald JF. Evidence for the complexity of microRNA-mediated regulation in ovarian cancer: a systems approach. PLoS One. 2011; 6(7):e22508.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/21811625) |
| **16.** | *Huda A, Bowen NJ, Conley AB, Jordan IK. Epigenetic regulation of transposable element derived human gene promoters. Gene. 2011 Apr 01; 475(1):39-48.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/21215797) |
| **17.** | *Liu Y, Chen Y, Momin A, Shaner R, Wang E, Bowen NJ, Matyunina LV, Walker LD, McDonald JF, Sullards MC, Merrill AH. Elevation of sulfatides in ovarian cancer: an integrated transcriptomic and lipidomic analysis including tissue-imaging mass spectrometry. Mol Cancer. 2010 Jul 12; 9:186.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20624317) |
| **18.** | *Du J, Tian Z, Bowen NJ, Schmutz J, Shoemaker RC, Ma J. Bifurcation and enhancement of autonomous-nonautonomous retrotransposon partnership through LTR Swapping in soybean. Plant Cell. 2010 Jan; 22(1):48-61.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20081112) |
| **19.** | *Bowen NJ, Walker LD, Matyunina LV, Logani S, Totten KA, Benigno BB, McDonald JF. Gene expression profiling supports the hypothesis that human ovarian surface epithelia are multipotent and capable of serving as ovarian cancer initiating cells. BMC Med Genomics. 2009 Dec 29; 2:71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20040092) |
| **20.** | *Wang J, Bowen NJ, Mariño-Ramírez L, Jordan IK. A c-Myc regulatory subnetwork from human transposable element sequences. Mol Biosyst. 2009 Dec; 5(12):1831-9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19763338) |
| **21.** | *Carpenedo RL, Bratt-Leal AM, Marklein RA, Seaman SA, Bowen NJ, McDonald JF, McDevitt TC. Homogeneous and organized differentiation within embryoid bodies induced by microsphere-mediated delivery of small molecules. Biomaterials. 2009 May; 30(13):2507-15.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19162317) |
| **22.** | *Köbel M, Kalloger SE, Boyd N, McKinney S, Mehl E, Palmer C, Leung S, Bowen NJ, Ionescu DN, Rajput A, Prentice LM, Miller D, Santos J, Swenerton K, Gilks CB, Huntsman D. Ovarian carcinoma subtypes are different diseases: implications for biomarker studies. PLoS Med. 2008 Dec 02; 5(12):e232.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19053170) |
| **23.** | *Arakaki AK, Mezencev R, Bowen NJ, Huang Y, McDonald JF, Skolnick J. Identification of metabolites with anticancer properties by computational metabolomics. Mol Cancer. 2008 Jun 17; 7:57.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/18559081) |
| **24.** | *Matyunina LV, Bowen NJ, McDonald JF. LTR retrotransposons and the evolution of dosage compensation in Drosophila. BMC Mol Biol. 2008 Jun 04; 9:55.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/18533037) |
| **25.** | *Moreno CS, Matyunina L, Dickerson EB, Schubert N, Bowen NJ, Logani S, Benigno BB, McDonald JF. Evidence that p53-mediated cell-cycle-arrest inhibits chemotherapeutic treatment of ovarian carcinomas. PLoS One. 2007 May 16; 2(5):e441.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/17505532) |
| **26.** | *Menendez L, Walker D, Matyunina LV, Dickerson EB, Bowen NJ, Polavarapu N, Benigno BB, McDonald JF. Identification of candidate methylation-responsive genes in ovarian cancer. Mol Cancer. 2007 Jan 25; 6:10.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/17254359) |
| **27.** | *Bowen NJ, Jordan IK. Exaptation of protein coding sequences from transposable elements. Genome Dyn. 2007; 3:147-162.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/18753790) |
| **28.** | *Bowen NJ, Logani S, Dickerson EB, Kapa LB, Akhtar M, Benigno BB, McDonald JF. Emerging roles for PAX8 in ovarian cancer and endosalpingeal development. Gynecol Oncol. 2007 Feb; 104(2):331-7.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/17064757) |
| **29.** | *Polavarapu N, Bowen NJ, McDonald JF. Newly identified families of human endogenous retroviruses. J Virol. 2006 May; 80(9):4640-2.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16611924) |
| **30.** | *Polavarapu N, Bowen NJ, McDonald JF. Identification, characterization and comparative genomics of chimpanzee endogenous retroviruses. Genome Biol. 2006; 7(6):R51.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16805923) |
| **31.** | *Bowen NJ, Palmer MB, Wade PA. Chromosomal regulation by MeCP2: structural and enzymatic considerations. Cell Mol Life Sci. 2004 Sep; 61(17):2163-7.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15338046) |
| **32.** | *Carney GE, Bowen NJ. p24 proteins, intracellular trafficking, and behavior: Drosophila melanogaster provides insights and opportunities. Biol Cell. 2004 May; 96(4):271-8.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15145531) |
| **33.** | *Bowen NJ, Fujita N, Kajita M, Wade PA. Mi-2/NuRD: multiple complexes for many purposes. Biochim Biophys Acta. 2004 Mar 15; 1677(1-3):52-7.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15020045) |
| **34.** | *Jordan IK, Bowen NJ. Computational analysis of transposable element sequences. Methods Mol Biol. 2004; 260:59-71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15020802) |
| **35.** | *Bowen NJ, Jordan IK, Epstein JA, Wood V, Levin HL. Retrotransposons and their recognition of pol II promoters: a comprehensive survey of the transposable elements from the complete genome sequence of Schizosaccharomyces pombe. Genome Res. 2003 Sep; 13(9):1984-97.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/12952871) |
| **36.** | *Arudchandran A, Cerritelli SM, Bowen NJ, Chen X, Krause MW, Crouch RJ. Multiple ribonuclease H-encoding genes in the Caenorhabditis elegans genome contrasts with the two typical ribonuclease H-encoding genes in the human genome. Mol Biol Evol. 2002 Nov; 19(11):1910-9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/12411600) |
| **37.** | *Bowen NJ, Jordan IK. Transposable elements and the evolution of eukaryotic complexity. Curr Issues Mol Biol. 2002 Jul; 4(3):65-76.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/12074196) |
| **38.** | *Bowen NJ, McDonald JF. Drosophila euchromatic LTR retrotransposons are much younger than the host species in which they reside. Genome Res. 2001 Sep; 11(9):1527-40.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11544196) |
| **39.** | *Hooper JD, Bowen N, Marshall H, Cullen LM, Sood R, Daniels R, Stuttgen MA, Normyle JF, Higgs DR, Kastner DL, Ogbourne SM, Pera MF, Jazwinska EC, Antalis TM. Localization, expression and genomic structure of the gene encoding the human serine protease testisin. Biochim Biophys Acta. 2000 Jun 21; 1492(1):63-71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11004480) |
| **40.** | *Bowen NJ, McDonald JF. Genomic analysis of Caenorhabditis elegans reveals ancient families of retroviral-like elements. Genome Res. 1999 Oct; 9(10):924-35.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10523521) |
| **41.** | *McDonald JF, Matyunina LV, Wilson S, Jordan IK, Bowen NJ, Miller WJ. LTR retrotransposons and the evolution of eukaryotic enhancers. Genetica. 1997; 100(1-3):3-13.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/9440254) |

**THANK YOU FOR USING THE RTRN RESEARCH COLLABORATION AND PROFESSIONAL NETWORKING SERVICE.**