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

**Narrative**

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| *Our research focus is to understand molecular basis of prostate cancer development and progression. We currently have two projects in this area. The first project is focused on understanding the role of Inhibitor of differentiation 4 (Id4) in prostate development, castration resistant prostate cancer and chemo-sensitivity around the p53/ PTEN pathway. The second, project addresses how inflammation and infection causes prostate cancer. The observation that body’s failure to effectively fight inflammation or infection causes cancer is the basis of this project. Our group is looking at molecular signatures in genes (SNP and expression) that cause inflammation that we hope will indicate if a person has increased susceptibility to prostate cancer. Our overall hypothesis is that body’s inflammatory response, under the genetic control and influenced by race, environment and dietary habits is a major determinant of prostate cancer.* |

**Other Positions**

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| **Title** | *Professor* |
| **Institution** | *Clark Atlanta University* |
| **Department** | *Biological Sciences* |
| **Division** | *Centre for Cancer Research and Therapeutics Development* |

**Publications**

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| **1.** | *Singh JK, Hutt DM, Tait B, Guy NC, Sivils JC, Ortiz NR, Payan AN, Komaragiri SK, Owens JJ, Culbertson D, Blair LJ, Dickey C, Kuo SY, Finley D, Dyson HJ, Cox MB, Chaudhary J, Gestwicki JE, Balch WE. Management of Hsp90-Dependent Protein Folding by Small Molecules Targeting the Aha1 Co-Chaperone. Cell Chem Biol. 2020 Mar 19; 27(3):292-305.e6.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/32017918) |
| **2.** | *Joshi JB, Patel D, Morton DJ, Sharma P, Zou J, Hewa Bostanthirige D, Gorantla Y, Nagappan P, Komaragiri SK, Sivils JC, Xie H, Palaniappan R, Wang G, Cox MB, Chaudhary J. Inactivation of ID4 promotes a CRPC phenotype with constitutive AR activation through FKBP52. Mol Oncol. 2017 04; 11(4):337-357.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/28252832) |
| **3.** | *Morton DJ, Patel D, Joshi J, Hunt A, Knowell AE, Chaudhary J. ID4 regulates transcriptional activity of wild type and mutant p53 via K373 acetylation. Oncotarget. 2017 Jan 10; 8(2):2536-2549.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/27911860) |
| **4.** | *Korang-Yeboah M, Patel D, Morton D, Sharma P, Gorantla Y, Joshi J, Nagappan P, Pallaniappan R, Chaudhary J. Intra-tumoral delivery of functional ID4 protein via PCL/maltodextrin nano-particle inhibits prostate cancer growth. Oncotarget. 2016 Oct 18; 7(42):68072-68085.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/27487149) |
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| **6.** | *Bhosle SM, Hunt A, Chaudhary J. A Modified Coupled Spectrophotometric Method to Detect 2-5 Oligoadenylate Synthetase Activity in Prostate Cell Lines. Biol Proced Online. 2016; 18:9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26997919) |
| **7.** | *Pant BP, Bhatta RC, Chaudhary JS, Awasthi S, Mishra S, Sharma S, Cuddapah PA, Gwyn SE, Stoller NE, Martin DL, Keenan JD, Lietman TM, Gaynor BD. Control of Trachoma from Achham District, Nepal: A Cross-Sectional Study from the Nepal National Trachoma Program. PLoS Negl Trop Dis. 2016 Feb; 10(2):e0004462.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26871898) |
| **8.** | *Rohani L, Morton DJ, Wang XQ, Chaudhary J. Relative Stability of Wild-Type and Mutant p53 Core Domain: A Molecular Dynamic Study. J Comput Biol. 2016 Feb; 23(2):80-89.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26675082) |
| **9.** | *Patel D, Chinaranagari S, Chaudhary J. Basic helix loop helix (bHLH) transcription factor 3 (TCF3, E2A) is regulated by androgens in prostate cancer cells. Am J Cancer Res. 2015; 5(11):3407-21.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26807321) |
| **10.** | *Korang-Yeboah M, Gorantla Y, Paulos SA, Sharma P, Chaudhary J, Palaniappan R. Polycaprolactone/maltodextrin nanocarrier for intracellular drug delivery: formulation, uptake mechanism, internalization kinetics, and subcellular localization. Int J Nanomedicine. 2015; 10:4763-81.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/26251597) |
| **11.** | *Sharma P, Chinaranagari S, Chaudhary J. Inhibitor of differentiation 4 (ID4) acts as an inhibitor of ID-1, -2 and -3 and promotes basic helix loop helix (bHLH) E47 DNA binding and transcriptional activity. Biochimie. 2015 May; 112:139-50.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25778840) |
| **12.** | *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) |
| **13.** | *Patel D, Morton DJ, Carey J, Havrda MC, Chaudhary J. Inhibitor of differentiation 4 (ID4): From development to cancer. Biochim Biophys Acta. 2015 Jan; 1855(1):92-103.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25512197) |
| **14.** | *Brown SG, Knowell AE, Hunt A, Patel D, Bhosle S, Chaudhary J. Interferon inducible antiviral MxA is inversely associated with prostate cancer and regulates cell cycle, invasion and Docetaxel induced apoptosis. Prostate. 2015 Feb 15; 75(3):266-79.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25327819) |
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| **19.** | *Knowell AE, Patel D, Morton DJ, Sharma P, Glymph S, Chaudhary J. Id4 dependent acetylation restores mutant-p53 transcriptional activity. Mol Cancer. 2013 Dec 13; 12:161.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24330748) |
| **20.** | *Carey JP, Knowell AE, Chinaranagari S, Chaudhary J. Id4 promotes senescence and sensitivity to doxorubicin-induced apoptosis in DU145 prostate cancer cells. Anticancer Res. 2013 Oct; 33(10):4271-8.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24122992) |
| **21.** | *Reuven DG, Shashikala HB, Mandal S, Williams MN, Chaudhary J, Wang XQ. Supramolecular Assembly of DNA on Graphene Nanoribbons. J Mater Chem B. 2013 Aug 28; 1(32):3926-3931.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24032074) |
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| **26.** | *Sharma P, Chinaranagari S, Patel D, Carey J, Chaudhary J. Epigenetic inactivation of inhibitor of differentiation 4 (Id4) correlates with prostate cancer. Cancer Med. 2012 Oct; 1(2):176-86.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/23342267) |
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| **32.** | *Ifere GO, Barr E, Equan A, Gordon K, Singh UP, Chaudhary J, Igietseme JU, Ananaba GA. Differential effects of cholesterol and phytosterols on cell proliferation, apoptosis and expression of a prostate specific gene in prostate cancer cell lines. Cancer Detect Prev. 2009; 32(4):319-28.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19186008) |
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