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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) |
| **5.** | *Komaragiri SK, Bostanthirige DH, Morton DJ, Patel D, Joshi J, Upadhyay S, Chaudhary J. ID4 promotes AR expression and blocks tumorigenicity of PC3 prostate cancer cells. Biochem Biophys Res Commun. 2016 09 09; 478(1):60-66.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/27462022) |
| **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) |
| **15.** | *Chinaranagari S, Sharma P, Chaudhary J. EZH2 dependent H3K27me3 is involved in epigenetic silencing of ID4 in prostate cancer. Oncotarget. 2014 Aug 30; 5(16):7172-82.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/25115397) |
| **16.** | *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) |
| **17.** | *Abid SN, Richardson TE, Powell HM, Jaichander P, Chaudhary J, Chapman KM, Hamra FK. A-single spermatogonia heterogeneity and cell cycles synchronize with rat seminiferous epithelium stages VIII-IX. Biol Reprod. 2014 Feb; 90(2):32.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24389876) |
| **18.** | *Mandal S, Abebe F, Chaudhary J. -174G/C polymorphism in the interleukin-6 promoter is differently associated with prostate cancer incidence depending on race. Genet Mol Res. 2014 Jan 10; 13(1):139-51.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/24446297) |
| **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) |
| **22.** | *Sharma P, Knowell AE, Chinaranagari S, Komaragiri S, Nagappan P, Patel D, Havrda MC, Chaudhary J. Id4 deficiency attenuates prostate development and promotes PIN-like lesions by regulating androgen receptor activity and expression of NKX3.1 and PTEN. Mol Cancer. 2013 Jun 21; 12:67.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/23786676) |
| **23.** | *Glymph S, Mandal S, Knowell AE, Abebe F, Chaudhary J. The myxovirus resistance A (MxA) gene -88G>T single nucleotide polymorphism is associated with prostate cancer. Infect Genet Evol. 2013 Jun; 16:186-90.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/23438650) |
| **24.** | *Strong N, Millena AC, Walker L, Chaudhary J, Khan SA. Inhibitor of differentiation 1 (Id1) and Id3 proteins play different roles in TGFß effects on cell proliferation and migration in prostate cancer cells. Prostate. 2013 May; 73(6):624-33.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/23060149) |
| **25.** | *Sharma P, Patel D, Chaudhary J. Id1 and Id3 expression is associated with increasing grade of prostate cancer: Id3 preferentially regulates CDKN1B. Cancer Med. 2012 Oct; 1(2):187-97.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/23342268) |
| **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) |
| **27.** | *Patel D, Chaudhary J. Increased expression of bHLH transcription factor E2A (TCF3) in prostate cancer promotes proliferation and confers resistance to doxorubicin induced apoptosis. Biochem Biophys Res Commun. 2012 May 25; 422(1):146-51.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/22564737) |
| **28.** | *Mandal S, Abebe F, Chaudhary J. 2''-5'' oligoadenylate synthetase 1 polymorphism is associated with prostate cancer. Cancer. 2011 Dec 15; 117(24):5509-18.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/21638280) |
| **29.** | *Schmidt M, Asirvatham AJ, Chaudhary J. Inhibitor of differentiation 1 (ID1) promotes cell survival and proliferation of prostate epithelial cells. Cell Mol Biol Lett. 2010 Jun; 15(2):272-95.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20186495) |
| **30.** | *Carey JP, Asirvatham AJ, Galm O, Ghogomu TA, Chaudhary J. Inhibitor of differentiation 4 (Id4) is a potential tumor suppressor in prostate cancer. BMC Cancer. 2009 Jun 07; 9:173.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19500415) |
| **31.** | *Bethel CR, Chaudhary J, Anway MD, Brown TR. Gene expression changes are age-dependent and lobe-specific in the brown Norway rat model of prostatic hyperplasia. Prostate. 2009 Jun 01; 69(8):838-50.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19204916) |
| **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) |
| **33.** | *Shah GV, Thomas S, Muralidharan A, Liu Y, Hermonat PL, Williams J, Chaudhary J. Calcitonin promotes in vivo metastasis of prostate cancer cells by altering cell signaling, adhesion, and inflammatory pathways. Endocr Relat Cancer. 2008 Dec; 15(4):953-64.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/18784182) |
| **34.** | *Asirvatham AJ, Carey JP, Chaudhary J. ID1-, ID2-, and ID3-regulated gene expression in E2A positive or negative prostate cancer cells. Prostate. 2007 Sep 15; 67(13):1411-20.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/17639499) |
| **35.** | *Chaudhary J, Schmidt M. The impact of genomic alterations on the transcriptome: a prostate cancer cell line case study. Chromosome Res. 2006; 14(5):567-86.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16823619) |
| **36.** | *Asirvatham AJ, Schmidt MA, Chaudhary J. Non-redundant inhibitor of differentiation (Id) gene expression and function in human prostate epithelial cells. Prostate. 2006 Jun 15; 66(9):921-35.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16541417) |
| **37.** | *Asirvatham AJ, Schmidt M, Gao B, Chaudhary J. Androgens regulate the immune/inflammatory response and cell survival pathways in rat ventral prostate epithelial cells. Endocrinology. 2006 Jan; 147(1):257-71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16195407) |
| **38.** | *Gaynor BD, Chidambaram JD, Cevallos V, Miao Y, Miller K, Jha HC, Bhatta RC, Chaudhary JS, Osaki Holm S, Whitcher JP, Holbrook KA, Fry AM, Lietman TM. Topical ocular antibiotics induce bacterial resistance at extraocular sites. Br J Ophthalmol. 2005 Sep; 89(9):1097-9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/16113356) |
| **39.** | *Chaudhary J, Schmidt M, Sadler-Riggleman I. Negative acting HLH proteins Id 1, Id 2, Id 3, and Id 4 are expressed in prostate epithelial cells. Prostate. 2005 Aug 01; 64(3):253-64.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15717313) |
| **40.** | *Chaudhary J, Sadler-Riggleman I, Ague JM, Skinner MK. The helix-loop-helix inhibitor of differentiation (ID) proteins induce post-mitotic terminally differentiated Sertoli cells to re-enter the cell cycle and proliferate. Biol Reprod. 2005 May; 72(5):1205-17.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15647457) |
| **41.** | *Chaudhary J, Sadler-Riggleman I, Skinner MK. Identification of a novel Sertoli cell gene product SERT that influences follicle stimulating hormone actions. Gene. 2004 Jan 07; 324:79-88.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/14693373) |
| **42.** | *Holm SO, Jha HC, Bhatta RC, Chaudhary JS, Thapa BB, Davis D, Pokhrel RP, Yinghui M, Zegans M, Schachter J, Frick KD, Tapert L, Lietman TM. Comparison of two azithromycin distribution strategies for controlling trachoma in Nepal. Bull World Health Organ. 2001; 79(3):194-200.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11285662) |
| **43.** | *Frick KD, Lietman TM, Holm SO, Jha HC, Chaudhary JS, Bhatta RC. Cost-effectiveness of trachoma control measures: comparing targeted household treatment and mass treatment of children. Bull World Health Organ. 2001; 79(3):201-7.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11285663) |
| **44.** | *Gaynor BD, Holbrook KA, Whitcher JP, Holm SO, Jha HC, Chaudhary JS, Bhatta RC, Lietman T. Community treatment with azithromycin for trachoma is not associated with antibiotic resistance in Streptococcus pneumoniae at 1 year. Br J Ophthalmol. 2003 Feb; 87(2):147-8.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/12543738) |
| **45.** | *Chaudhary J, Skinner MK. Identification of a novel gene product, Sertoli cell gene with a zinc finger domain, that is important for FSH activation of testicular Sertoli cells. Endocrinology. 2002 Feb; 143(2):426-35.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11796495) |
| **46.** | *Chaudhary J, Skinner MK. Role of the transcriptional coactivator CBP/p300 in linking basic helix-loop-helix and CREB responses for follicle-stimulating hormone-mediated activation of the transferrin promoter in Sertoli cells. Biol Reprod. 2001 Aug; 65(2):568-74.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11466227) |
| **47.** | *Chaudhary J, Johnson J, Kim G, Skinner MK. Hormonal regulation and differential actions of the helix-loop-helix transcriptional inhibitors of differentiation (Id1, Id2, Id3, and Id4) in Sertoli cells. Endocrinology. 2001 May; 142(5):1727-36.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/11316735) |
| **48.** | *Chaudhary J, Skinner MK. Characterization of a novel transcript of 14-3-3 theta in Sertoli cells. J Androl. 2000 Sep-Oct; 21(5):730-8.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10975420) |
| **49.** | *Chaudhary J, Mosher R, Kim G, Skinner MK. Role of winged helix transcription factor (WIN) in the regulation of Sertoli cell differentiated functions: WIN acts as an early event gene for follicle-stimulating hormone. Endocrinology. 2000 Aug; 141(8):2758-66.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10919260) |
| **50.** | *Chaudhary J, Kim G, Skinner MK. Expression of the basic helix-loop-helix protein REBalpha in rat testicular Sertoli cells. Biol Reprod. 1999 May; 60(5):1244-50.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10208991) |
| **51.** | *Chaudhary J, Skinner MK. Basic helix-loop-helix proteins can act at the E-box within the serum response element of the c-fos promoter to influence hormone-induced promoter activation in Sertoli cells. Mol Endocrinol. 1999 May; 13(5):774-86.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10319327) |
| **52.** | *Chaudhary J, Skinner MK. E-box and cyclic adenosine monophosphate response elements are both required for follicle-stimulating hormone-induced transferrin promoter activation in Sertoli cells. Endocrinology. 1999 Mar; 140(3):1262-71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/10067852) |
| **53.** | *Chaudhary J, Skinner MK. Comparative sequence analysis of the mouse and human transferrin promoters: hormonal regulation of the transferrin promoter in Sertoli cells. Mol Reprod Dev. 1998 Jul; 50(3):273-83.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/9621303) |
| **54.** | *Lee HY, Chaudhary J, Walsh GL, Hong WK, Kurie JM. Suppression of c-Fos gene transcription with malignant transformation of human bronchial epithelial cells. Oncogene. 1998 Jun 11; 16(23):3039-46.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/9662337) |
| **55.** | *Chaudhary J, Cupp AS, Skinner MK. Role of basic-helix-loop-helix transcription factors in Sertoli cell differentiation: identification of an E-box response element in the transferrin promoter. Endocrinology. 1997 Feb; 138(2):667-75.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/9003001) |
| **56.** | *Chaudhary J, Whaley PD, Cupp A, Skinner MK. Transcriptional regulation of sertoli cell differentiation by follicle-stimulating hormone at the level of the c-fos and transferrin promoters. Biol Reprod. 1996 Mar; 54(3):692-9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/8835393) |
| **57.** | *Whaley PD, Chaudhary J, Cupp A, Skinner MK. Role of specific response elements of the c-fos promoter and involvement of intermediate transcription factor(s) in the induction of Sertoli cell differentiation (transferrin promoter activation) by the testicular paracrine factor PModS. Endocrinology. 1995 Jul; 136(7):3046-53.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/7789331) |
| **58.** | *Chaudhary J, Skinner MK. Transcriptional regulation of Sertoli cell differentiation (transferrin promoter activation) during testicular development. Dev Genet. 1995; 16(2):114-8.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/7736661) |
| **59.** | *Bhattacharya S, Chaudhary J, Das C. Responsiveness to gonadotropin releasing hormone of human term trophoblast cells in vitro: induction by estradiol. Biochem Int. 1992 Oct; 28(2):363-71.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/1333770) |
| **60.** | *Chaudhary J, Bhattacharyya S, Das C. Regulation of progesterone secretion in human syncytiotrophoblast in culture by human chorionic gonadotropin. J Steroid Biochem Mol Biol. 1992 May; 42(3-4):425-32.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/1376614) |
| **61.** | *Bhattacharyya S, Chaudhary J, Das C. Antibodies to hCG inhibit progesterone production from human syncytiotrophoblast cells. Placenta. 1992 Mar-Apr; 13(2):135-9.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/1631026) |
| **62.** | *Chaudhary J, Sharma RK, Majumdar SS, Bhatti DP, Misro MM, Das RP. Effect of STS-557 (17 alpha-cyanomethyl 17 beta-hydroxy-estra-4, 9(10)-dien-3-one) on blood hormone levels, the testis, accessory sex organs and fertility of rats. Int J Androl. 1990 Oct; 13(5):398-407.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/2126530) |
| **63.** | *Majumdar SS, Chaudhary J, Sharma RK, Das RP. Contraceptive potentiality of STS-557--a feasibility study in male bonnet monkey (Macaca radiata). Contraception. 1990 Jun; 41(6):641-53.* | [PubMed](http://www.ncbi.nlm.nih.gov/pubmed/2361371) |

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