

CURRICULUM VITAE

Name: Jesse David Martinez

Chronology of Education:

1972-1980 University of Nevada, Reno Nevada, Zoology, B.S. Degree
1981-1987 University of Nevada, Reno Nevada, Biochemistry, Ph.D. Degree
Dissertation: *Molecular cloning and characterization of sequences coding for components of the human cytomegalovirus (AD169) virion.*
Director: Stephen C. St. Jeor, Ph.D.
1988-1991 Princeton University, Princeton, New Jersey, Postdoctoral Training
Advisor: Arnold J. Levine, Ph.D.

Statement of Major Fields:

My overall interest is in elucidating the mechanisms that lead to dysregulated cell signaling that occurs during tumorigenesis. My overall goal is to use the knowledge gained from our investigations to develop strategies for either restoring the homeostasis exhibited by normal cells or to interfere with signaling processes that support tumor cell growth and survival. My diverse interests have resulted in the pursuit of two projects that focus on different aspects of cancer cell biology. In the first of these we are investigating the role that bile acids may have in promoting colon cancer. Here we are investigating the effects that bile acids have on colon cancer etiology using both molecular and cellular biology approaches and animal models to identify bile acid-activated signaling pathways. The second project focuses on a novel observation made while characterizing the interaction between the p53 tumor suppressor and the scaffolding protein 14-3-3 gamma which suggests that 14-3-3 gamma overexpression may cooperate with loss of p53 function to promote chromosome instability. In these studies we are focused on understanding how 14-3-3gamma affects the processes of chromosome segregation.

Chronology of Employment:

1988-1991 Postdoctoral training in the laboratory of Arnold J. Levine, Ph.D., Department of Molecular Biology, Princeton University.
1991-1998 Assistant Professor, Radiation Oncology, University of Arizona, Tucson, AZ
1991-present Arizona Cancer Center, Comprehensive Member
1991-present Cancer Biology Graduate Interdisciplinary Program, Member
1997- present Genetics Program, Member
1998 - present Investigator in Center for Toxicology
1998 - 2004 Associate Professor, Radiation Oncology, University of Arizona.
2003 - 2004 Associate Professor, Department of Cell Biology & Anatomy, University of Arizona.
2004 - present Professor, Cellular and Molecular Medicine, Radiation Oncology, University of Arizona
2000 - present Investigator, Cancer Prevention and Control Program
2005 – 2010, 2013-present Director of Research Education, University of Arizona Cancer Center
2010 – present Investigator, Cancer Health Disparities Institute, University of Arizona
2010 - present Chair, Cancer Biology Graduate Interdisciplinary Program, University of Arizona
2010- 2013 Chief Scientific Officer, University of Arizona Cancer Center

2013-present Director of Research Education and Facilities, University of Arizona Cancer Center

Honors and Awards:

1972 - 1973 Fleischman Foundation Scholarship, awarded competitively to graduating high school seniors.

1982-1985 National Science Foundation Minority Graduate Fellowship, awarded competitively to students nationally.

1996 Louis J. Kettel Faculty Mentor Award; Outstanding Basic Sciences Mentor

Memberships:

1983 to present American Society of Microbiology

1983 to present Sigma Xi Society

1993 to present American Association for Advancement of Science

1995 to present American Association for Cancer Research

2002 to present The American Society for Cell Biology

Service

Local/State:

1. Medical Student Research Program (MSRP) Summer Institute on Medical Ignorance for State and Local Minority High School Students Selection Committee, 1993 to 1997.
2. College of Medicine Admissions Committee, Applicant Interviewer. 1993 to 2000.
3. College of Medicine Medical School Admissions Committee. Interviewer. 1994-1999.
4. Graduate College Representative at Preliminary Oral and Final Exams for Ph.D. degree, 1996 to 2000.
5. Clinical Skin Cancer Prevention Program Project Grant, The Arizona Cancer Center, Invited Internal Reviewer, 1998.
6. Clinical Colon Cancer Prevention Program Project Grant, The Arizona Cancer Center, Invited Internal Reviewer, 1998.
7. Phoenix Friends of the Cancer Center, Speaker on progress of the DNA microarray facility and intended uses. 1998.
8. Genetics Interdisciplinary Program, adjunct member and member of curriculum committee, 1998 to present.
9. Fostering and Achieving Cultural Equity and Sensitivity (F.A.C.E.S.), Invited Speaker. 1998.
10. Minority Access to Research Careers (MARC) Program. Mentor. 1998 to present
11. Minority Access to Research Careers (MARC) Program Grant Application Site Visit. Invited Participant in Grant Defense. 1998.
12. U of A Hispanic Board of Alumni Luncheon. Interaction with and promotion of U. of A. Minority Programs. 1998.
13. President's Cancer Panel, Arizona Cancer Center. Invited Participant. 1998.
14. Luncheon Interview of candidates for Arizona Cancer Center Director. 1998.
15. Cancer Biology Admissions Committee. Chairman. 1998 - 2000.

16. Pilot Projects Program at the Southwest Environmental Health Sciences Center, applications reviewer, 1999.
17. Computer Services User Committee, Arizona Cancer Center. Committee Member. 1999 - 2000.
18. Search Committee for Molecular Geneticists/Cell cycle checkpoint cancer researcher, First try. Committee Member. 1999.
19. McNair Achievement Program. Student Mentor. 1999 to present.
20. Waddell Lecture selection committee. Chairman. 1999 - 2010.
21. American Cancer Society IRG Review Committee. Chairman. 1999 to 2011.
22. Search Committee for Molecular Geneticists/Cell cycle checkpoint cancer researcher, Second try. Committee Member. 2000-2001.
23. Search Committee for Molecular Geneticists/Cell cycle checkpoint cancer researcher, Third try. Committee Member. 2002.
24. Medical Student Research Program Summer Institute on Medical Ignorance for State and Local Minority High School Students and K-12 Science Teachers: Invited Speaker, 1998, 1999, 2000.
25. Medical Oncology Resident Search Committee. Applicant Interviewer. 2000.
26. Arizona Cancer Center Equipment Task Force. Chairman. 2000 to present.
27. Cancer Biology Interdisciplinary Program. Executive Committee. Member. 2000 to 2010.
28. Cancer Biology Curriculum Advisor. 2000 to 2010.
29. Radiation Oncology Committee for Interview and Recruitment of Residents into the Radiation Oncology Residency Program. 2001.
30. Internal Review Committee for Academic Program Review for the Department of Radiation Oncology, Committee Member. 2001.
31. Dean's Career Development Awards Program. Proposal Reviewer. 2001
32. Development and Communication Office, Arizona Cancer Center. Promoting Donor Familiarity with Arizona Cancer Center. 2001
33. Hispanic Center for Excellence. Participant. 2001 to 2004.
34. Arizona Cancer Center Gastroenterology Cancer Program. Member. 2002 to present.
35. Search Committee for Clinical Physicians, Department of Radiation Oncology. Applicant Reviewer. 2003.
36. Search Committee for Physicist, Department of Radiation Oncology. 2002.
37. Cell Biology & Anatomy Ad hoc Retreat Committee. Committee member. 2003.
38. Cell Biology & Anatomy Graduate Studies Committee. Committee member. 2003.
39. The Arizona Biosciences Roadmap. Cancer Therapeutics Platform Retreat. Hosted by the Flinn Foundation. Participant. 2003.
40. Graduate Interdisciplinary Program Advisory Council (GIDPAC). Council Member. 2003-2005
41. CBA Departmental Annual Retreat organizer, 2004
42. CBA Graduate Studies Committee, 2004 - 2005

43. Cancer Biology Graduate Interdisciplinary Program Academic Review of Program and Chair, Committee Member, 2004
44. ISBS Faculty Search Committee, Member, 2004
45. Graduate Council, Committee Member, 2004
46. CBA Promotion & Tenure Committee, 2005
47. ACS-IRG Pilot Project Program, Chairman, 2005
48. AZCC Publicity Committee, 2005
49. Graduate Interdisciplinary Program Advisory Council, Chairman, 2005
50. Graduate Council, committee member, 2005
51. Associate Vice President for Research, Director of Interdisciplinary Programs, Development officer for Graduate Programs, search committee, 2005
52. Annual Review Care Committee, 2005
53. Waddell Lecture committee, Chairman, 2005 to present
54. Arizona Cancer Center Director's Committee, 2005 to present
55. College of Medicine Dean's Research Council Space Committee. 2005 to 2010
56. College of Medicine Committee on Promotion and Tenure. 2005 to 2008
57. Cell Biology & Anatomy, Annual Review Committee. 2005-2008
58. Mentor & Advisor, Matthew Gage, Assistant Professor, Northern Arizona University, 2006-2009
59. College of Medicine Dean's Research Council Space Committee, Chair. 2007 – 2010
60. AZCC Director's Committee, member, 2007 to present
61. AZCC 30th Anniversary Celebration committee, 2007
62. Director of the Research Core for the Native American Cancer Research Partnership, 2007
63. McNair Achievement Program, student mentor, 2007
64. Search Committee for Pathology Chair, Member, 2007-2008
65. New Investigator Workshop, office of Associate VPR. 2007 - present
66. MCB/CBA Faculty Search Committee 2008
67. Cancer Biology GIDP, graduate student academic advisor, 2008
68. Radiation Oncology Promotion & Tenure Committee, Chairman 2008
69. CURE program, program director, 2008
70. Salmon Award Lecture committee, chair, 2008 - 2010
71. Radiation Oncology Faculty Recruiting Interviewer, 2009
72. Native American Cancer Research Partnership, Program Steering Committee Meeting, Phoenix, 2009
73. CBA annual evaluation of faculty committee, 2009
74. Cancer Biology GIDP graduate student recruiting, interviewer, 2009
75. Cancer Prevention & Control R25 training grant executive committee, member, 2009
76. GI faculty candidate, interviewer, 2009

77. NACP retreat, Sedona, 2009
78. Radiation Oncology, Promotion & Tenure Committee, 2009
79. Cancer Biology GIDP, Admissions Committee, 2010
80. Cancer Biology GIDP, student recruiting, interviewer, 2010
81. ACS-IRG awardee presentations to the local ACS chapter, organizer and MC, 2010
82. Latin/o Association of Graduate Student in Engineering and Science, Lunchtime Speaker, 2010

Current:

- Junior Faculty Mentoring Committee, Greg Rogers, 2009 – present
- Junior Faculty Mentoring Committee, Felicia Goodrum, 2009 – present
- NACP (U54) Executive Committee, 2009-present

National/International:

1. Israel Science Foundation. Research proposal reviewer. 2000
2. NIH, Colorectal Cancer Prevention Workshop. Diet-Induced Changes in the Colonic Environment and Colorectal Cancer Prevention. Bethesda M.D. Invited participant. 2001.
3. Minority Access to Research Careers (MARC) scholars program. Invited Speaker, California State University, Long Beach. 2003.
4. American Association for Cancer Research DeWitt S. Goodman Lecture Committee. Committee Member. 2002
5. NCI, Chemical Pathology/Cancer Etiology Study Section. Regular Member 2001-2005.
6. NCI, Chemical Pathology/Cancer Etiology Study Section. Special Emphasis Panel, Chairman. 2002
7. NCI, National Research Service Award fellowship Study Section. Ad Hoc reviewer 2004 - 2005
8. NCI, Cancer Etiology Study Section, Special Emphasis Panel (July, October, November) Ad Hoc reviewer. 2005
9. DOD, Breast Cancer Program, Ad Hoc reviewer, 2005
10. NCI, Cancer Etiology Study Section, Ad Hoc reviewer. 2006
11. NCI, Subcommittee F – Manpower & Training (T32 and K99 awards), Ad Hoc reviewer, 2006
12. Mentor & Advisor, Yupo Ma, Assistant Professor, Nevada Cancer Center, 2007-2008
13. NCI, Special Emphasis Panel (ZRG1 Onc-L(02)M), Ad Hoc reviewer. 2007
14. NCI, Cancer Etiology Study Section (February, October), Ad Hoc reviewer, 2008
15. NCI, Cancer Etiology Study Section, Ad Hoc reviewer, 2009
16. NCI, AED Review Panel, Ad Hoc reviewer, 2009
17. Cancer Biology Training Consortium (CABTRAC), Treasurer, 2009
18. NCI, Subcommittee I – Career Development (K08 & K22), Ad Hoc reviewer, 2010
19. CABTRAC, Vice President, 2010

20. CABTRAC meeting organizing committee, Tucson meeting, 2010
21. NCI, Molecular Oncology Study Section, Ad Hoc reviewer, 2010.
22. NCI, Subcommittee I – Career Development (K08 &K22), 2010.
23. Reviewer of manuscripts from the following Journals: Cancer Research, Cancer Epidemiology, Biomarkers & Prevention, BioMed Central, Carcinogenesis, Molecular Carcinogenesis, Cancer Detection and Prevention, Life Sciences, International Journal of Radiation Oncology, Biology and Physics, Clinical Cancer Research, Cancer Letters, Nucleic Acids Research, Journal of Cancer Research and Clinical Oncology, Cell Death & Differentiation, Oncogene, Biochemical Journal, The American Journal of Physiology - Gastrointestinal and Liver Physiology, Journal of Pharmacology and Experimental Therapeutics, Gastroenterology

Current:

NCI, Cancer Diet & Prevention Study Section, member, 2010-2012

Wake Forest University, External Advisory Board for Postdoctoral Training, 2010-present

University of Kentucky T32 Training Grant External Advisory Board, 2012-present

University of Colorado T32 Training Grant External Advisory Board, 2014

Publications/Creative Activity:

1. Hall MR, Aghili N, Hall C, Martinez JD, St. Jeor SC. Chromosomal organization of the herpes simplex virus type 2 genome. *Virology* 123:344-356 1982.
2. Martinez JD and St. Jeor SC. Molecular cloning and analysis of three cDNA clones homologous to human cytomegalovirus RNAs present during late infection. *Journal of Virology*. 60:531-538 1986.
3. Seal BS, Martinez JD, Hall MR, St. Jeor SC. Occurrence of bovine herpesvirus-1 DNA in nucleosomes and chromatin of bovine herpesvirus-1-infected cells: identification of a virion-associated protein in chromatin of infected cells. *Archives of Virology* 99:221-236 1988. (PMID: 2835948)
4. Martinez JD, Lahijani RS, St. Jeor SC. Analysis of a region of the human cytomegalovirus (AD169) genome coding for a 25-kilodalton virion protein. *Journal of Virology* 63:233-241 1989.
5. Zunino SJ, Bleackley RC, Martinez JD, D Hudig. RNKP-1, a novel natural killer-associated serine protease gene cloned from RNK-16 cytotoxic lymphocytes. *Journal of Immunology* 144:2001-2009. 1990.
6. Martinez JD, Georgoff I, Martinez JP, Levine AJ. Cellular localization and cell cycle regulation by a temperature sensitive p53 protein. *Genes and Development* 5:151-159 1991.
7. Zambetti GP, Quartin RS, Martinez JD, Georgoff I, Momand J, Dittmer D, Finlay CA, Levine AJ. Regulation of transformation and the cell cycle by p53. In Symposium 56- The cell cycle. Cold Spring Harbor Laboratory. Cold Spring Harbor, New York. 1991.
8. Quartin R, Moore M, Seiberg M, Finlay CA, Chu S, Martinez JD, Dittmer D, Momand J, Levine AJ. The p53 gene and protein and its interactions with viral oncogene products. In: Tumor Suppressor Genes; Pezcoller Symposium. Trenton, Italy pp. 181-191. 1992.
9. Domann R and Martinez J. Alternative to cloning cylinders for isolation of adherent cell clones. *Biotechniques* 18:594-595 1995.

10. Zheng Z-Y, Bernstein H, Bernstein C, Payne CM, Martinez JD, Gerner EW. Bile acid activation of the gadd153 promoter and of p53-independent apoptosis: relevance to colon cancer. *Cell Death and Differentiation* 3(4):407-414 1995. (PMID: 17180111)
11. Milczarek G, Martinez JD, Bowden GT. p53 phosphorylation: biochemical and functional consequences. *Life Sciences* 60:1-11 1996.
12. Martinez JD, Craven M, Joseloff E, Milczarek G, Bowden GT. Regulation of DNA binding and transactivation in p53 by nuclear localization and phosphorylation. *Oncogene* 14:2511-2520 1997. (PMID: 9191051)
13. Martinez JD, Pennington ME, Craven MT, Wartens RL, Cress AE. Free radicals generated by ionizing radiation signal nuclear translocation of p53. *Cell Growth and Differentiation* 8:941-949 1997. (PMID: 9300177)
14. Chen W, Barthelman M, Martinez JD, Alberts D, Gensler HL. Inhibition of cyclobutane pyrimidine dimer formation in epidermal p53 gene of UV-irradiated mice by α -tocopherol. *Nutrition and Cancer* 29: 205-211 1997.
15. Martinez JD, Craven MT, Pennington ME. Selective binding of p53 response elements by p53 containing complexes. *Oncogene* 16: 453-458 1998. (PMID: 9484834)
16. Whitesell L, Sutphin PD, Pulcini EJ, Martinez JD, Cook PH. The physical association of multiple molecular chaperone proteins with mutant p53 is altered by geldanamycin, an hsp90-binding agent. *Molecular and Cellular Biology* 18: 1517-1524 1998. (PMID: 9488468)
17. Martinez JD, Stratagoules ED, Payne CM, Powell A, Powell M, LaRue J, Earnest DL. Different bile acids exert distinct biological effects: induction of apoptosis by deoxycholic acid and growth arrest by ursodeoxycholic acid. *Nutrition and Cancer* 31(2):111-118 1998. (PMID: 9770722)
18. Woolridge DP, Martinez JD, Stringer D, Gerner EW. Characterization of a Novel Spermidine/Spermine Acetyltransferase in *Bacillus subtilis*. *Biochemical Journal* 340(3): 753-758 1999. (PMID: 10359661)
19. Milczarek G, Gupta A, Martinez JD, Bowden GT. Okadaic acid mediates p53 hyperphosphorylation and growth arrest in cells with wild-type p53 but increases aberrant mitoses in cells with non-functional p53. *Carcinogenesis* 20(6): 1043-1048 1999. (PMID: 10357786)
20. LaRue JM, Stratagoules ED, Martinez JD. Deoxycholic acid-induced apoptosis is switched to necrosis by bcl-2 and calphostin C. *Cancer Letters* 152(1): 107-113 2000. (PMID: 10754212)
21. Qiao D, LaRue JM, Powell AA, Chen W, Martinez JD. Bile acid induced activation of AP-1 requires both ERK- and PKC-dependent signaling. *Journal of Biological Chemistry* 275:15090-15098 2000. (PMID: 10748108)
22. Gaitonde SV, Riley JR, Martinez JD. Conformational phenotype of p53 is linked to nuclear translocation. *Oncogene* 19(35):4042-4049 2000. (PMID: 10962561)
23. Gaitonde SV, Qi W, Falsey RR, Sidell N, Martinez JD. Morphologic conversion of a neuroblastoma derived cell line by E6 mediated p53 degradation. *Cell Growth & Differentiation* 12:19-27 2001. (PMID: 11205742)
24. Powell AA, Batta AK, LaRue JM, Salen GR, Martinez JD. Bile acid hydrophobicity is correlated with induction of apoptosis and/or growth arrest in HCT116 cells. *Biochemical Journal* 356(2): 481-486 2001. (PMID: 11368775)
25. Qiao D, Stratagoules ED, Martinez JD. Activation and role of mitogen-activated protein kinases in deoxycholic acid-induced apoptosis. *Carcinogenesis* 22(1): 35-41 2001. (PMID: 11159738)

26. Qiao D, Gaitonde SV, Martinez JD. Deoxycholic acid suppresses p53 by stimulating proteasome-mediated p53 protein degradation. *Carcinogenesis* 22(6): 957-964 2001. (PMID: 11375905)
27. Finch JS, Rosenberger SF, Martinez JD, Bowden GT. Okadaic acid induces transcription through a CCAAT Box and NF-Y. *Gene* 267:135-144 2001. (PMID: 11311563)
28. Qi W, Qiao D, Martinez JD. Caffeine induces G1 growth arrest, apoptosis and radiosensitivity in human lung cancer cells. *Radiation Research* 157:166-174 2002. (PMID: 11835680)
29. Qiao D, Im E, Martinez JD. Activator protein-1 (AP-1) and CCAAT/enhancer-binding protein (C/EBP) mediated GADD153 expression is involved in deoxycholic acid-induced apoptosis. *Biochimica et Biophysica Acta - Molecular and Cellular Biology of Lipids* 1583: 108-116 2002. (PMID: 12069855)
30. Leroy G, Chen H, Martinez JD. A Shallow Parser Based on Closed-Class Words to Capture Relations in Biomedical Text. *Journal of Biomedical Informatics* 36: 145-158. 2003. (PMID: 14615225)
31. Stea B, Falsey R, Kislin K, Patel J, Glanzberg, H, Carey S, Ambrad AA, Meuillet EJ, Martinez JD. Time and dose-dependent radiosensitization of the glioblastoma multiforme U251 cells by the EGF receptor tyrosine kinase inhibitor ZD1839 (Iressa). *Cancer Letters* 2002: 43-51. 2003. (PMID: 14643025)
32. Qi, W and Martinez JD. Reduction of 14-3-3 proteins correlates with increased sensitivity to killing of human lung cancer cells by ionizing radiation. *Radiation Research* 160:217-223 2003. (PMID: 12859233)
33. Im, E and Martinez JD. Ursodeoxycholic acid (UDCA) inhibits deoxycholic acid (DCA)-induced apoptosis via modulation of EGFR/Raf-1/ERK signaling in human colon cancer cells. *Journal of Nutrition*. 134: 483–486 2004. (PMID: 14747693)
34. Qi W, Liu X, Qiao D, Martinez JD. Isoform-specific expression of 14-3-3 proteins in lung cancer tissues. *International Journal of Cancer*. 113:359-363 2005. (PMID: 15455356)
35. Im E, Akare S, Powell AA, Martinez JD. Ursodeoxycholic acid can suppress deoxycholic acid induced apoptosis by stimulating Akt/PKB-dependent survival signaling. *Nutrition and Cancer* 51(1): 110-116. 2005. (PMID: 15749637)
36. Feng Y, Qi W, Martinez J, Nelson MA. The cyclin-dependent kinase 11 interacts with 14-3-3 proteins. *Biochemical and biophysical research communications* 331(4):1503-9, 2005.
37. Akare S, Martinez JD. Bile acid induces hydrophobicity-dependent membrane alterations. *Biochimica et biophysica acta-Molecular and Cellular Biology of Lipids* 1735(1):59-67 2005. (PMID: 15951237)
38. Martinez JD. 14-3-3 proteins: Do they have a role in human cancer? *Future Oncology*. 1(5):631-3, 2005. (PMID: 16556040)
39. Jean-Louis S, Akare S, Ali MA, Mash EA, Meuillet E, Martinez JD. Deoxycholic acid causes membrane perturbations in HCT116 cells. *Journal of Biological Chemistry* 281:14948-14960. 2006. (PMID: 16547009)
40. Powell AA, Akare S, Qi W, Jean-Louis S, Herzer P, Martinez JD. Resistance to ursodeoxycholic acid-induced growth arrest can also result in resistance to deoxycholic acid-induced apoptosis and increased tumorigenicity. *BMC Cancer* 6:219 2006. (PMID: 16948850)
41. Akare S, Jean-Louis S, Chen W, Wood DJ, Powell AA, Martinez JD. Ursodeoxycholic acid modulates histone acetylation and induces differentiation and senescence. *International Journal of Cancer* 119:2958-2969 2006. (PMID: 17019713)
42. Mayelzadeh F and Martinez JD. DNA binding and selective gene induction by different forms of the p53 protein. *Oncogene* 26:2955-2963 2006. (PMID: 17130840)

43. Qi W, Liu X, Chen W, Li Q, Martinez JD. Overexpression of 14-3-3 gamma causes polyploidization in H322 lung cancer cells. *Molecular Carcinogenesis* 46:847-856. 2007. (PMID: 17394238)
44. Li X, Chen H, Huang Z, Su H, and Martinez JD. Global mapping of gene/protein interactions in PubMed abstracts: a framework and an experiment with p53 interactions. *Journal of Biomedical Informatics* 40(5): 453-465. 2007 (PMID: 17317333)
45. Li Q, Falsey RR, Gaitonde S, Sotello V, Kislin K, Martinez JD. Genetic analysis of p53 nuclear importation. *Oncogene* 26:7885-7893 2007. (PMID: 17599045)
46. Meade-Tollin L and Martinez JD. Loss of p53 and overexpression of EphA2 predict poor prognosis for ovarian cancer patients. *Cancer Biology & Therapy* 6: 288-289 2007. (PMID: 17426437)
47. Hong S, Qi W, Brabant M, Bosco G, Martinez JD. Human 14-3-3 gamma results in abnormal proliferation in the developing eye of *Drosophila melanogaster*. *Cell Division*. 3:2-11 2008. (PMID: 18194556)
48. Junk DJ, Vrba L, Watts GS, Oshiro MM, Martinez JD, Futscher BW. Different mutant/wild-type p53 combinations cause a spectrum of increased invasive potential in nonmalignant immortalized human mammary epithelial cells. *Neoplasia*. 10(5):450-461 2008. (PMID: 18472962)
49. Li Q, Feldman RA, Radhakrishnan VM, Carey S, and JD Martinez. Hsf1 is required for the nuclear translocation of the p53 tumor suppressor. *Neoplasia*. 10(10):1138-1145 2008. (PMID: 18813348)
50. Warters RL, Gafney DK, Kramer GF, Martinez JD, and AE Cress. Transient dephosphorylation of p53 serine 376 as an early response to ionizing radiation. *Radiation Research* 171:725-734 2009 (PMID: 19580479)
51. Feldman, R and JD Martinez. Growth suppression by ursodeoxycholic acid involves caveolin-1 enhanced degradation of EGFR. *Biochimica et biophysica acta* 1793:1387-1394 2009. (PMID: 19446582)
52. Radhakrishnan, VM and JD Martinez. 14-3-3gamma induces oncogenic transformation by stimulating MAP kinase and PI3K signaling. *PLoS ONE* 5(7):e11433, 2010. PMC2900177
53. Martinez, JD. Restoring p53 tumor suppressor activity as an anticancer therapeutic strategy. *Future Oncology* 6:12:1857-62, 2010 PMC3039681
54. Heintze E, Aguilera C, Davis M, Fricker A, Li Q, Martinez J, Gage MJ. Toxicity of depleted uranium complexes is independent of p53 activity. *J Inorg Biochem*. 105(2):142-8 2011. PMC3018829
55. Li, Q and JD Martinez. P53 is transported into the nucleus via an Hsf1-dependent nuclear localization mechanism. *Molecular Carcinogenesis* 50:143-152. 2011 PMC3735450
56. Li Q and Martinez JD. Loss of HSF1 results in defective radiation-induced G(2) arrest and DNA repair. *Radiat. Rese* 176(1):17-24, 2011. PMC3142266
57. Radhakrishnan VM, Jensen TJ, Cui H, Futscher BW, Martinez JD. Hypomethylation of the 14-3-3 α promoter leads to increased expression in non-small cell lung cancer. *Genes Chromosomes Cancer* 50(10):830-36, 2011. PMC3155660
58. Radhakrishnan VM, Putnam CW, Qi W, Martinez JD. P53 suppresses expression of the 14-3- gamma oncogene. *BMC Cancer* 11:378, 2011. PMC3189929
59. Radhakrishnan VM, Putnam CW, and JD Martinez. Activation of phosphatidylinositol 3-kinase (PI3K) and mitogen-activated protein kinase (MAPK) signaling and the consequent induction of transformation by over expressed 14-3-3 gamma require specific amino acids within its N-terminal variable region II. *J. Biol. Chem*. 287:43300-43311. 2012. PMC3527917.

60. Chambers SK and Martinez JD. The significance of p53 isoform expression in serous ovarian cancer. *Future Oncology* 8(6): 683-686, 2012. PMID 22764765.

Book Chapter:

Martinez JD, Parker MT, Fultz KE, Ignatenko NA, Gerner EW. The Molecular Biology of Cancer. In: Burger's Medicinal Chemistry & Drug Discovery. Sixth Edition. Wiley & Sons. New York, NY 2003.

Grants and Contracts

Federal

Current:

Mechanisms of Colon Cancer Chemoprevention by Ursodeoxycholic Acid

CA129688-04	NCI	20% effort
P.I. – J. Martinez	\$664,000 directs	01/01/2010 – 12/31/2013

Mechanisms of Colon Cancer Chemoprevention by Ursodeoxycholic Acid

CA129688-04S1	NCI	
P.I. – J. Martinez	\$45,571 annual directs	01/01/2010 – 12/31/2013
Diversity Supplement – Sara Centuori, PhD		

Cancer Biology Training Grant

T32 CA09213	NCI	5% effort
P.I. – J. Martinez	\$2,167,120 directs	05/23/08 - 04/30/13
(no-cost extension 2014)		
Renewal pending		

Partnership for Native American Cancer Prevention

U54 CA143924	NCI	10% effort for J. Martinez
M.P.I – (J. Martinez)	\$4,514,872 directs	9/28/2009 – 08/31/2014
This is a multi-institutional, multiple P.I. grant that has research, training, and outreach components.		

Previous

1. Influence of genetic background on p53 inactivation. (minority supplement)

RO1 CA40584-09S1	NIH/NCI	50% effort for J.Martinez
P.I. - G.T. Bowden	\$164,457 total costs	05/01/93 to 04/30/94.
minority supplement to parent grant CA40584-10.		

2. Reactivation of p53 function an anti-cancer therapy.

R29CA64842	NIH/NCI	50% effort
P.I. - J. Martinez	\$349,993 directs	05/01/96 to 03/31/01

3. Bile Acids and Gene Expression in Colon Apoptosis

P01 CA-72008-01	NIH/NCI	25% effort for J.Martinez
P.I. - E.W. Gerner	\$240,680 directs	07/01/97 to 06/30/00
J.Martinez Project 2 director		

4. Bile acid induced AP-1 signaling in colon cancer (Project 3).

PO1CA72008.	NIH/NCI	25% effort for J.Martinez
P.I. - E.W. Gerner	\$779,326 directs	01/01/01 to 12/31/05
J. Martinez Project 3 leader		

6. Minority supplement for Ms. Samira Jean-Louis

P01CA72008	NIH/NCI	5% effort for J. Martinez
P.I. - E.W. Gerner	\$82,368 total cost	09/01/02 to 12/31/05

minority supplement to the colon cancer program project grant.

- 7. GeneScene: Revealing Gene Pathway Knowledge.**
 LM07299-02 NLM 10% effort for J. Martinez
 P.I. - Hsinchin Chen \$76,000 directs 04/01/02 to 03/31/06
 J. Martinez Co-P.I.
- 8. Genetic analysis of p53 activation.**
 R01 CA09077 NIH/NCI 25% effort
 P.I. – J. Martinez \$765,500 directs 07/01/03 to 06/30/07
- 9. Native American Cancer Research Partnership**
 U54 CA096281 NCI 10% effort
 P.I. – L. Canfield \$5,947,286 directs 06/20/2002 to 05/31/2009
 J. Martinez director of the research core at U of A site.
- 10. The role of p53 and 14-3-3 in genomic instability.**
 RO1 CA107510 NCI 20% effort
 P.I. - J. Martinez \$750,000 directs 04/01/04 to 03/31/09
- 11. American Cancer Society Institutional Research Grant**
 IRG-74-001-28 ACS 10% effort (no salary)
 P.I. – J. Martinez \$330,000 directs 01/01/06 to 12/31/09
 This grant provided monies for distribution as seed funding for new investigators.
- 12. Role of p53 and 14-3-3 in genomic instability (bridge award)**
 R56CA107510-06 NCI 10% effort
 P.I. – J. Martinez \$186,000 directs 7/21/09 – 06/30/11
- 13. Cancer Biology Training Grant – Postdoctoral Minority Supplement (ARRA/Stimulus)**
 T32 CA 09213-32S1 NCI 10% effort
 P.I. – J. Martinez \$101,302 total costs 09/30/09 - 09/29/11
 Diversity Supplement- Dr. Raymond-Whish
- 14. Cancer Biology Training Grant – Predoctoral Minority Supplement**
 T32 CA 09213-35S1 NCI 10% effort
 P.I. – J. Martinez \$101,302 total costs 09/30/10 - 09/14/13
 Diversity Supplement- Benjamin Onyeagucha

State

- 1. Characterization of cell cycle control protein activities during p53 mediated G₁ arrest.**
 2S07 RR05675-24 BSRG 5% effort
 P.I. - J. Martinez \$5000 01/01/93 to 12/31/93
- 2. Regulation of p53 tumor suppressor activity.**
 P.I. - J. Martinez UA VP for Research 5% effort
 \$4353 06/01/94 to 05/31/95
- 3. Reactivation of p53 function and anti-cancer therapy.**
 P.I. - J. Martinez ADCRC 25% effort
 \$150,000 07/01/96 to 06/30/99
- 4. p53-dependent apoptosis in lung cancer.**
 10013 ADCRC 5% effort
 P.I. - J. Martinez \$150,000 total costs 07/01/99 to 06/30/02
- 5. Nutritional Modulation of Colorectal Cancer Risks.**
 P.I. – J. Martinez ABRC 5% effort
 \$150,000 total costs 7/1/06 to 6/30/09

Private

1. Investigation of complex formation between p53 molecules.

IRG#110P	ACS-IRG	10% effort
P.I - J. Martinez	\$10,000 direct costs	01/01/99 to 12/31/02

2. p53 and anti-cancer therapy.

	Wendy Will Case	25% effort
P.I. - J. Martinez	\$22,000 total directs costs	01/01/96 to 12/31/96

Teaching:

Courses Taught

Course # Description

Current courses, primary instructor:

CBIO552 Cancer Biology

CBIO553 Advanced Topics in Cancer Biology

CBIO597a Experimental Design

CBIO597c Grant Writing for Graduate Students

PCOL 630B Cellular Communications and Signal Transduction (lecturer)

Previous courses:

CBIO 589 Cancer Genetics & Cytogenetics (course director)

EPI 551 Cancer Epidemiology and Prevention

CBIO 562 Tumor Immunology

CBA 557 Principles in Cell Biology

CBIO 681 Laboratory Rotation for Cancer Biology Graduate Students

** Radiobiology Radiobiology lecture for Radiation Oncology Residents

** Advanced Topics, Cancer lectures in 3rd year medical school curriculum

Individual Student Contact

Primary PhD Research Advisor

Completed

Cancer Biology GIDP: Supriya Gaitonde, Ashley Powell, Samira Jean-Louis, Rebecca Feldman

Genetics GIDP: Faroozan Mayelzadeh

Current

Cancer Biology GIDP: Jesse Trujillo

Dissertation committees

Cancer Biology GIDP: Xiaozhen Xie, Dorothea von Bredow, Elizabeth Joseloff, Ashok Gupta, Janine Einsphar, Weixing Chen, Fang Xi, Nhan Tran, Tracy Davis, Elizabeth Pulcini, Brent Butts, Suzanne Maliner Stratton, Michele Taylor, Kevin Kwei, Jason Beliakoff, Manolis Demetriou, Tom Sroka, Elisabeth Bair, Brandon Jeffy, Warner Bair, Mike Bachelor, Damian Junk, Ryan Falsey, Sheriff Morgan, Ben Bitler, Steven Su, Edwin Paz, Shannon Fortin Ensign.

Molecular and Cellular Biology: Gavin Milczarek, Melissa Gonzales, Naveen Babbar, Dipti Mehta, April Childs, Sangita Pawar, Mamata Pochampala, Joseph Ahlander, David Morse, Mike Dellinger, Pascal Herzer, Hui Liu, Teresa White Horm.

Genetics GIDP: Matt Hart

Biochemistry: Kathryn Lawson.

Epidemiology: Mercedes Arguellos, Andrew Abalos.

Microbiology & Immunology: Jin-Seon Im.

Management Information Systems: Seongmin Hahn.

Pharmaceutical Sciences: Monica Yellowhair

Others: Zhi-Ying (Jean) Zheng, Miguel Angulo, Cara Crowley, Erin Segal, Phoebe Luo.

Masters Thesis:

Noah Theiss, GIST

Current Doctoral Dissertation Committees:

Corbie Ball, Cancer Biology GIDP

Nadia Hassounah, Cancer Biology GIDP

Joey Klebba, Cell Biology and Anatomy (Cellular and Molecular Medicine)

Cynthia Sandoval, Cancer Biology GIDP

Lipsa Das, Cancer Biology GIDP

Sabrina Maisel, Cancer Biology GIDP

Postdoctoral Fellows Trained :

Dinhua Qiao, Wenqing Qi, UnOk Im, Wemin Chen, Kelly Gordon, Sandeep Akare, Vijayababu Marati Radhakrishnan, Qiang Li.

Current: Charlie Putnam, Sara Centuori.

Medical Residents trained:

Hannah Linden, Arron Ambrad

Undergraduates Trained:

Mike Pennington, Jayme Riley, Jane Carvajal, Ryan Falsey, Tina Pellovida, Amber Voelzow, Leslee Friedman, Veronica Sotelo, Raymond Bunch, Natalia Sanchez, Audrey Yeoh, Jenna Hicks, Gerard Brophy, Didio Martinez, Ann Marshak, Steven Carey, Bob Yniguez, Catherine Clarke, Alon Unger, Marla Matal, Elias Stratagoules, Emily Williams, Crystal Cooper, Danielle Correia, Victor Clausse (France) Janna Larue, Karim Hackler, Justin Saul, Andrew Bergerson, Anna K. Liu, Natalie Liu, Gavin Young (UBRP), Filbert Yazzie.
Current: Josh Brownlee, Cecil Gomes.

High school students: Current: Brenda Picasso

Faculty Members Mentored:

Emmanuelle Meuillet, Giovanni Bosco, Donato Romagnolo , Daruka Mahadevan, Steve Stratton, Greg Rogers, Matthew Gage, Yupo Ma, Felicia Goodrum.