

CURRICULUM VITAE

JAIME RAFAEL MERCHAN

1. *DATE: 03/13/2017*

I. PERSONAL

2. *Name:* Jaime Rafael Merchan
3. *Office Phone:* (305) 243-1287
4. *Address:* 1475 NW. 12th Avenue, Miami Fl 33136
5. *Current Academic Rank:* Associate Professor of Medicine
6. *A. Current Track of Appointment:* Tenured
6. *Primary Department:* Medicine
7. *Secondary or Joint Appointment:* None
8. *Citizenship:* Ecuador
9. *Immigration Status:* Naturalized US Citizen

II. HIGHER EDUCATION

10. Institutional:

Universidad Católica de Santiago de Guayaquil; Doctor in Medicine and Surgery.
Guayaquil, Ecuador. Date conferred: 4/1992.

Harvard University; Master in Medical Sciences, Cambridge, MA.
Date conferred: 6/2003

11. Non-Institutional

Intern in Medicine, University of Miami/Jackson Memorial Medical Center. 7/94-
6/95

Resident in Medicine, University of Miami/Jackson Memorial Medical Center.
7/95-6/97

Chief Medical Resident, University of Miami/VA Medical Center. 7/97-6/98

Clinical Fellow in Hematology – Oncology, Beth Israel Deaconess Medical Center and Harvard Medical School. 7/98-6/01

Research Fellow (Sukhatme Laboratory), Beth Israel Deaconess Medical Center and Harvard Medical School. 7/99-6/01

Fellow in the Clinical Investigator Training Program, Beth Israel Deaconess Medical Center and the Division of Health Sciences and Technology at Harvard Medical School and Massachusetts Institute of Technology. 7/01-6/03

12. Certification and Licensure:

Board Certifications:

Diplomate, American Board of Internal Medicine. 1998-2008

Diplomate, Medical Oncology. 2001-(recertified)

Diplomate, Hematology. 2002-(recertified)

Medical Licensure

Florida License Registration (ME 74584). 1997-present.

Massachusetts License Registration (157197). 1997-2005.

Minnesota License Registration (46255). 2003-2008

III EXPERIENCE

13. Academic

1997-1998 Clinical Instructor in Medicine, University of Miami School of Medicine.

1998-2001 Clinical Fellow in Medicine, Harvard Medical School.

2001-2003 Instructor in Medicine, Harvard Medical School

2004-2006 Assistant Professor of Oncology. Mayo College of Medicine

2006-2009 Assistant Professor of Clinical Medicine, University of Miami Miller School of Medicine

2009-2013 Assistant Professor of Medicine, University of Miami Miller School of Medicine (Tenure Track).

2013-2016 Associate Professor of Medicine, University of Miami Miller School of Medicine (Tenure Track).

2016- Tenured Associate Professor of Medicine, University of Miami Miller School of Medicine

14. Hospital Appointments

1992-1993 Guayas Provincial Health Direction: Guayaquil, Ecuador. Rural Physician,

1994-1997 University of Miami Jackson Memorial/VA Medical Center, Miami, FL: Housestaff

1997-1998 University of Miami Jackson Memorial/VA Medical Center. Miami, FL: Chief Medical Resident.

1998-2001 Beth Israel Deaconess Medical Center. Boston, MA: Clinical Fellow.

2001-2003 Beth Israel Deaconess Medical Center. Boston, MA: Attending Physician.

2003-2006 Mayo Clinic. Rochester, MN. Staff Physician. Consultant, Department of Oncology.

2006-present University of Miami/Sylvester Comprehensive Cancer Center, Miami, FL. Attending Physician

15. Non-Academic: N/A

16. Military: N/A

IV. PUBLICATIONS

17. Book Chapters

1. **Merchan JR.**, The Oncologist and Renal Cell Carcinoma, In: Incidental Finding, C. Chauhan and M. Blute (Eds). 39-44, 2007.
2. Cudris Maldonado J, **Merchan J**. Immunotherapy in Renal Cell Carcinoma, in Advances in Tumor Immunology and Immunotherapy. J.D. Rosenblatt, E.R. Podack, G.N.Barber, A. Ochoa (Eds). 125-147. 2013.
3. **Merchan J**: Chemotherapy and Renal Insufficiency. In: UpToDate, Rose, BD (Ed), Waltham, MA, 2017.

18. Juried or Peer Reviewed Articles or Exhibitions

1. Freire A, Cely C, **Merchan J.**: Spontaneous Pneumothorax and Cancer: Report of three cases and Review of the Literature. *Oncologia*. 1994; 2: 13-16.
2. Ardalan B, Raez L, **Merchan J***, Franceschi D, et al.: Biomodulation of Fluorouracil in Colorectal Cancer. *Cancer Invest*; 16(4): 237-51 1998. (*the reference wrongly put my name as JAIME M, instead of MERCHAN, J)
3. Karumanchi SA, **Merchan J**, Sukhatme VP: Renal Cancer –Molecular mechanisms and newer therapeutic options. *Current Opinions in Nephrology and Hypertension*. 2002, 11: 37-42. PubMed PMID: 11753085.
4. **Merchan J**, Chan B, Kale S, Schnipper L, Sukhatme V: In vitro and in vivo induction of antiangiogenic activity by plasminogen activators and captopril *J Natl Cancer Inst* 2003; 95: 388-399. PubMed PMID: 12618504.
5. Maynard SE, Min J, **Merchan J**, Lim KH, Li J, Mondal S, Libermann T, Morgan JP, Sellke FW, Stillman IE, Epstein FH, Sukatme VP, Karumanchi SA: Excess placental sFlt-1 contributes to endothelial dysfunction, hypertension and proteinuria of pre-eclampsia. *J. Clin. Invest*. 2003 111: 649-658. PubMed PMID: 12618519; PubMed Central PMCID: PMC151901. *Editorial by Aernout Luttmun and Peter Carmeliet. J. Clin. Invest. 2003 111: 600-602.*
6. Chan B*, **Merchan J***, Kale S, Sukhatme V: Antiangiogenic Property of Human Thrombin. *Microvascular Research. Microvasc Res*. 2003; 66(1):1-14. *Shared first authorship. PubMed PMID: 12826069.
7. **Merchan JR**, Jayaram DR, Supko JG, He X, Bublely GJ, Sukhatme VP: Increased endothelial uptake of **paclitaxel** as a potential mechanism for its antiangiogenic effects: potentiation by Cox-2 inhibition. *Int. J. Cancer*. 2005 Jan 20;113(3): 90-8. PMID: 15455390

8. Hallak, L.K ; **Merchan, J**; Storgard, C.; Loftus, J; Russell, S.J. Tumor regression after treatment with targeted measles virus displaying echistatin against proliferating endothelial cells and multiple myeloma model tumors. *Cancer Res.* 2005 Jun 15; 65(12):5292-300. PubMed PMID: 15958576.
9. Leibovich BC, Cheville JC, Lohse CM, Zincke H, Kwon ED, **Merchan JR**, Blute ML: A Scoring Algorithm to Predict Survival for Patients with Metastatic Renal Cell Carcinoma: Stratification Tool for Prospective Clinical Trials. *J Urol.* 2005 Nov; 174(5):1759-63. 1763. PubMed PMID: 16217278.
10. **Merchan J**, Tang J, Hu G, Lin Y, Mutter W, Karumanchi S, Sukhatme V. Protease activity of urokinase and tumor progression in a syngeneic mammary cancer model. *Journal of the National Cancer Institute* 2006; 98(11): 756-64. *Editorial by Masashi Narazaki and Giovanna Tosato: J Natl Cancer Inst* 2006 98: 726-727. PubMed PMID: 16757700.
11. Motzer RJ, Rini BI, Bukowski RM, Curti BD, George DJ, Hudes GR, Redman BG, Margolin KA, **Merchan JR**, Wilding GT, Ginsberg MS, Bacik J, Bello CL, Kim ST, Baum CM, Michaelson MD: Pivotal Study of Sunitinib Malate (SU11248) Shows Efficacy in Patients with Metastatic Renal Cell Carcinoma. *Journal of the American Medical Association* 2006: 2516-24. PubMed PMID: 16757724.
12. Markovic SN, Suman VJ, Rao RA, Ingle J, Kaur J S., Erickson LA., Pitot HC., Croghan GA, **Merchan J R.**, Kottschade L., Nevala WK., Uhl CB., Alfred J., Creagan ET. A phase II study of ABT-510 (thrombospondin-1 analog) for the treatment of metastatic melanoma. *American Journal of Clinical Oncology.* 2007 Jun;30(3):303-9. PubMed PMID: 17551310.
13. G Huang, R Eisenberg, M Yan, S Monti, E Lawrence, P Fu, J Walbroehl, E Löwenberg, T Golub, **J Merchan**, D Tenen, S Markowitz, B Halmos. 15-hydroxyprostaglandin dehydrogenase is a target of HNF3 β and a tumor suppressor in lung cancer. *Cancer Research*, 2008 Jul 1;68(13):5040-8. doi: 10.1158/0008-5472.CAN-07-6575. PubMed PMID: 18593902; PubMed Central PMCID: PMC2762106.
14. Yuqi Jing, Caili Tong, Jin Zhang, Takafumi Nakamura, Ianko Iankov, Stephen J. Russell, **Jaime R. Merchan**. Tumor and vascular targeting of a novel oncolytic measles virus retargeted against the urokinase receptor. *Cancer Research*, 2009 Feb 15; 69(4):1459-1468. doi: 10.1158/0008-5472.CAN-08-2628. Epub 2009 Feb 10. PubMed PMID: 19208845; PubMed Central PMCID: PMC2739455.
15. Ascunce G, Ribeiro A, Rocha-Lima C, Larsen, M, Sleeman D, **Merchan J**, Szabo D, Levi J. Single Session EUS/ERCP in the evaluation of pancreaticobiliary disorders. *Surgical Endoscop*, 2010 Jun;24(6):1447-50. Epub 2010 Jan 7. PubMed PMID: 20054580.

16. R.S. Bhatt, **J. Merchan**, R. Parker, H. Wu, L. Zhang, V. Seery, J.V Heymach, M.B. Atkins, D. McDermott, V.P. Sukhatme. A phase II pilot trial of low dose, continuous infusion, or “metronomic”, paclitaxel and oral celecoxib in patients with metastatic melanoma. *Cancer*, 2010. 116 (7): 1751 – 1756. doi: 10.1002/cncr.24902. PubMed PMID: 20120033; PubMed Central PMCID: PMC2847062.
17. **Merchan JR**, Kovacs K, Railsback JW, Kurtoglu M, Jing Y, Pina Y, Murray TG, Lehrman MA, Lampidis TJ. Antiangiogenic Activity of 2-deoxy-D-glucose (2-DG). *PLoS One*. 2010 Oct 27;5(10):e13699. doi: 10.1371/journal.pone.0013699. PubMed PMID: 21060881; PubMed Central PMCID: PMC2965179.
18. Houston SK, Pina Y, Murray TG, Boutrid H, Cebulla C, Schelfler AC, Shi W, Celdran M, Feuer W, **Merchan J**, Lampidis TJ. Novel retinoblastoma treatment avoids chemotherapy: the effect of optimally timed combination therapy with angiogenic and glycolytic inhibitors on LHBETATAG retinoblastoma tumors. 2011. *Clinical Ophthalmology*. 2011 Jan 27; 5:129-37. doi: 10.2147/OPHT. S15179. PubMed PMID: 21339806; PubMed Central PMCID: PMC3037041.
19. Ascunce G, Ribeiro A, Reis I, Rocha-Lima C, Sleeman D, **Merchan J**, Levi J. EUS visualization and direct celiac ganglia neurolysis predicts better pain relief in patients with pancreatic malignancy (with video). *Gastrointest Endosc*. 2011 Feb;73(2):267-74. doi: 10.1016/j.gie.2010.10.029. PubMed PMID: 21295640.
20. Shin S-U, Cho H-M, **Merchan J**, Zhang J, Kovacs K, Jing Y, Ramakrishnan S, and Rosenblatt JD. Targeted delivery of anti-HER2 antibody-human endostatin P125A mutant fusion protein results in enhanced anti-tumor efficacy in murine and human breast tumor models. *Mol Cancer Ther*. 2011 Apr;10(4):603-14. doi: 10.1158/1535-7163.MCT-10-0804. Epub 2011 Mar 10. PubMed PMID: 21393427.
21. Kubiłiun N, Ribeiro A, Fan YS, Rocha-Lima CM, Sleeman D, **Merchan J**, Barkin J, Levi J. EUS-FNA with rescue Fluorescence in situ hybridization for the diagnosis of pancreatic carcinoma in patients with inconclusive on-site cytopathology results. *Gastrointest Endosc*. 2011 Sep;74(3):541-7. doi: 10.1016/j.gie.2011.04.043. Epub 2011 Jul 12. PubMed PMID: 21752364.
22. Isham CR, Tibodeau JD, Bossou AR, **Merchan JR**, Bible KC. The anticancer effects of chaetocin are independent of programmed cell death and hypoxia, and are associated with inhibition of endothelial cell proliferation. *Br J Cancer*. 2012 Jan 17;106(2):314-23. doi: 10.1038/bjc.2011.522. Epub 2011 Dec 20. PMID: 22187030
23. Hosein PJ, Macintyre J, Kawamura C, Maldonado JC, Ernani V, Loaiza-Bonilla A, Narayanan G, Ribeiro A, Portelance L, **Merchan JR**, Levi JU, Rocha-Lima CM. A retrospective study of neoadjuvant FOLFIRINOX in unresectable or borderline-

- resectable locally advanced pancreatic adenocarcinoma. *BMC Cancer*. 2012 May 29;12:199. doi: 10.1186/1471-2407-12-199. PubMed PMID: 22642850; PubMed Central PMCID: PMC3404979.
24. Talebi, TN, Stefanovic, A, **Merchan J**, Lian E, Silva, O. Sunitinib-induced Microangiopathic Hemolytic Anemia with Fatal Outcome. *American Journal of Therapeutics*. 2012 Jul;19(4):e143-5. doi: 10.1097/MJT.0b013e3181eefe8b. PMID: 21403468.
 25. **JR Merchan**, A Venkatraman, J Macintyre, KK Ciombor, J Levi, A Ribeiro, D Sleeman, A. Flores, M. Vulfovich, CM Rocha-Lima. Phase 2 study of Gemcitabine (g), oxaliplatin (o), cetuximab (c) for locally advanced or metastatic pancreatic cancer. *Am J Clin Oncol*. 2012 Oct;35(5):446-50. PubMed PMID: 21552097.
 26. Jing J, Kovacs, K, Kurisetti V, Jiang Z, Tsinoremas N, **Merchan J.R.** Role Of Plasminogen Activator Inhibitor-1 In Urokinase's Paradoxical In Vivo Tumor Suppressing Or Promoting Effects. *Mol Cancer Res*. 2012 Oct; 10(10):1271-81. PubMed Central PMCID: PMC3495620.
 27. Xi H, Barredo JC, **Merchan JR**, Lampidis TJ. Endoplasmic reticulum stress induced by 2-deoxyglucose but not glucose starvation activates AMPK through CaMKK β leading to autophagy. *Biochem Pharmacol*. 2013 May 15;85(10):1463-77. doi: 10.1016/j.bcp.2013.02.037. Epub 2013 Mar 13. PubMed PMID: 23500541.
 28. Wang X, Li G, Wang A, Zhang Z, **Merchan JR**, Halmos B. Combined Histone Deacetylase and Cyclooxygenase Inhibition Achieves Enhanced Antiangiogenic Effects in Lung Cancer Cells. *Mol Carcinog*. 2013 Mar;52(3):218-28. doi: 10.1002/mc.21846. PubMed PMID: 22121107.
 29. Hosein PJ, Lopes Jr GD, Pastorini VH, Gomez CM, Macintyre J, Zayas G, Reis IM, Montero AJ, **Merchan JR**, Rocha Lima CM. A phase II trial of nab-paclitaxel as second-line therapy in patients with advanced pancreatic cancer. *Am J Clin Oncol*. 2013 Apr;36(2):151-6. doi: 10.1097/COC.0b013e3182436e8c. PubMed PMID: 22307213.
 30. Motzer RJ, Hudson TE, Cella D, Reeves J, Hawkins R, Guo J, Nathan P, Staehler M, deSouza P, **Merchan JR**, Boleti E, Fife K, Jin J, Jones R, Uemura H, De Giorgi U, Hammenbard U, Wang J, Sternberg CN, Deen K, McCann L, Hackshaw MD, CrescenzoR, Pandite LN, Choueri TK. Pazopanib Versus Sunitinib in Metastatic Renal Cell Carcinoma. *N Engl J Med*. 2013 Aug 22;369(8):722-31. doi: 10.1056/NEJMoa1303989. PubMed PMID: 23964934.
 31. Kurisetti V, Heiber J, Myers R, Pereira GS, Goodwin JW, Federspiel MJ, Russell SJ, Peng KW, Barber G, **Merchan JR**. Preclinical Safety And Activity of VSV-

- IFN- β In An Immunocompetent Model Of Squamous Cell Carcinoma of The Head And Neck. *Head Neck*. 2013 Sep 30. doi: 10.1002/hed.23502.] PubMed PMID: 24115092.
32. Palacio S, Loaiza-Bonilla A, Kittaneh M, Kyriakopoulos C, Ochoa RE, Escobar M, Arango B, Restrepo MH, **Merchan JR**, Lima CM, Hosein PJ. Successful Use of Trastuzumab with Anthracycline-based Chemotherapy Followed by Trastuzumab Maintenance in Patients with Advanced HER2-positive Gastric Cancer. *Anticancer Res*. 2014 Jan;34(1):301-6. PubMed PMID: 24403478.
 33. Y Jing, J Zaias, R Duncan, SJ Russell, **JR Merchan**. In Vivo Safety, Biodistribution And Antitumor Effects Of uPAR Retargeted Oncolytic Measles Virus In Syngeneic Cancer Models. *Gene Therapy*. 2014 Mar;21(3):289-97. PMID: 24430235.
 34. Soares H, Bayraktar S, Blaya M, Lopes G, **Merchan J**, Macintyre J, Mayo C, Green M, Silva O, Levi J, Walker G, Rocha-Lima C. A Phase II Study of Capecitabine Plus Docetaxel in Gemcitabine-refractory Metastatic Pancreatic Cancer Patients: CapTere. *Cancer Chemotherapy and Pharmacology*. 2014 Apr;73(4):839-45. PMID: 24562589.
 35. Jing Y, Toro M, Zaias J, **Merchan J**. In vivo antimetastatic effects of uPAR retargeted measles virus in syngeneic and xenograft models of mammary cancer. *Breast Cancer Res Treat*. 2015 Jan;149(1):99-108. doi: 10.1007/s10549-014-3236-8. Epub 2014 Dec 18.
 36. **Merchan JR**, Qin R, Pitot H, Picus J, Liu G, Fitch T, Maples WJ, Flynn PJ, Fruth BJ, Erlichman C. Safety And Activity Of Temsirolimus And Bevacizumab In Patients With Advanced Renal Cell Carcinoma Previously Treated With Tyrosine Kinase Inhibitors: A Phase 2 Consortium Study. *Cancer Chemother Pharmacol*. 2015 Mar;75(3):485-93. doi: 10.1007/s00280-014-2668-5. Epub 2015 Jan 3. PMID: 25556030.
 37. Toro M, **Merchan JR**. Targeting Tumor Vasculature Through Oncolytic Virotherapy: Recent Advances. *Oncolytic Virotherapy*. 2015;4 169-181.
 38. Khushman M, Scherfenberg N, Cudris Maldonado J, Loaiza-Bonilla A, Velez M, Carcas L, Dammrich D, Hurtado-Cordovi J, Parajuli R, Pollack T, Harwood AP, Macintyre J, **Merchan JR**, Restrepo MH, Akunyili II, Ribeiro A, Narayanan G, Portelance L, Sleeman D, Levi JU, Rocha Lima CMS, Hosein PJ. Full dose neoadjuvant FOLFIRINOX is associated with prolonged survival in patients with locally advanced pancreatic adenocarcinoma. *Pancreatology*. 2015 Nov-Dec;15(6):667-73. doi: 10.1016/j.pan.2015.08.010. Epub 2015 Sep 12. PMID:26412296.

39. Toro Bejarano M, **Merchan JR**. Targeting tumor vasculature through oncolytic virotherapy: recent advances. **Oncolytic Virother**. 2015 Nov 11;4:169-81. doi: 10.2147/OV.S66045. 2015. Review. PMID: 27512680
40. Kovács K, Decatur C, Toro M, Pham DG, Liu H, Jing Y, Murray TG, Lampidis TJ, **Merchan JR**. 2-Deoxy-Glucose Down Regulates Endothelial Akt And Erk Via Interference With N-Linked Glycosylation, Induction Of Endoplasmic Reticulum Stress And Gsk-3 β Activation. **Mol Cancer Ther**. 2016 Feb;15(2):264-75. PMID: 26637370.
41. Montero AJ, Kwon D, Flores A, Kovacs K, Trent JC, Benedetto P, Rocha-Lima C, **Merchan JR**. A Phase I Clinical, Pharmacokinetic and Pharmacodynamic Study of Weekly or Every Three Week Ixabepilone and Daily Sunitinib in Patients with Advanced Solid Tumors. **Clin Cancer Res**. 2016 Feb 10. pii: clincanres.2184.2015. [Epub ahead of print]. PMID: 26864210.
42. Liu H, Kurtoglu M, León-Annicchiarico C, Munoz-Pinedo C, Barredo J, Leclerc G, **Merchan J**, Liu X, Lampidis T. Combining 2-Deoxy-D-glucose with fenofibrate leads to tumor cell death mediated by simultaneous induction of energy and ER stress. **Oncotarget**. 2016 May 10. doi: 10.18632/oncotarget.9263. [Epub ahead of print]. PMID: 27183907
43. Gajjar S, Yechieli R, Wolfson AH, Narayanan G, **Merchan J**, Portelance L. Outcomes Associated With a Combination of Radiation Therapy and Irreversible Electroporation for Pancreatic Cancer. *Int J Radiat Oncol Biol Phys*. 2016 Oct 1;96(2S):E206. doi: 10.1016/j.ijrobp.2016.06.1109. PMID: 27674060
44. Narayanan G, Hosein PJ, Beulaygue IC, Froud T, Scheffer HJ, Venkat SR, Echenique AM, Hevert EC, Livingstone AS, Rocha-Lima CM, **Merchan JR**, Levi JU, Yrizarry JM, Lencioni R. Percutaneous Image-Guided Irreversible Electroporation for the Treatment of Unresectable, Locally Advanced Pancreatic Adenocarcinoma. *J Vac Intervent Radiol*. 2016. Dec 16. ii: S1051-0443(16)30720-5. doi: 10.1016/j.jvir.2016.10.023. [Epub ahead of print]. PMID: 27993507.

19. Other Works, Publications and Abstracts (REFEREED)

1. Freire A, **Merchan J**, et al. Acute Severe Hyperuricemia induced by Pyrazinamide: Case Report and Review of the Literature. International Congress of the Pan American Medical Association. Guayaquil, September 1993.
2. **Merchan J**.: An unusual case of Fulminant Hepatic Failure. American College of Physicians. Associates Meeting (Florida Chapter). Tampa, Fl; April 1996.
3. Raez L, Pasquini M, **Merchan J**, Raub W, Bathe, Caldera H, Levi J, Benedetto P:

- Tumors of the Ampulla of Vater: Outcome and Prognostic Factors for Survival. Proc Am Soc Clin Oncol 18:298a, 1999.
4. Pasquini M, Raez L, Bathe O, Raub W, **Merchan J**, Caldera H, Levi J, Benedetto P: Preoperative Biliary Stents in Patients with Tumors of the Ampulla of Vater. Proc Am Soc Clin Oncol 18: 296a, 1999.
 5. **Merchan J**, Chan B, Sukhatme, V: Plasminogen Activators and Captopril generate Antiangiogenic Activity in Vitro. (Abstract: AACR annual meeting, New Orleans, LA, 2001).
 6. Parker RA, **Merchan JR**, Sukhatme VP. Innovative Phase II Design for Antiangiogenesis Agents. 2002 Spring Meeting of the Eastern North American Region of the International Biometric Society, Arlington VA March 17-20,2002.
 7. Maynard SE, **Merchan J**, Epstein FH, Sukhatme VP, Karumanchi SA: SFlt-1, a circulating VEGF antagonist is up-regulated in preeclampsia and contributes to endothelial dysfunction. American Society of Nephrology Meeting, October 30-November 5, 2002. **JASN** 2002, 13: FC280.
 8. **Merchan J**, Tang J, Hu G, Lin Y, Mutter W, Karumanchi S, Sukhatme V. Protease activity of urokinase delays tumor progression and prolongs survival in a syngeneic breast cancer model. *2004 AACR annual meeting, March, 2004.*
 9. Louay K. Hallak, **Jaime R. Merchan**, Suzanne M. Greiner, Chris M. Storgard, Stephen J. Russell. Dual Targeted Vector for Multiple Myeloma Tumors. *2004 ASGT annual meeting. June, 2004.*
 10. Hallak, L.K., **Merchan, J.R.**, Russell, S.J. Targeted measles virus displaying VEGF specifically enters cells through VEGF receptor but enhances tumor growth in an animal model. *American Society for Virology 24th Annual Meeting.* June, 2005.
 11. **Merchan JR.**, Tong, C., Takafumi, N., Iankov, I., Russell SJ.. In vitro and in vivo studies of a novel oncolytic measles virus fully retargeted against the urokinase receptor. *2006 AACR annual meeting: Late breaking abstracts. April, 2006.*
 12. D. F. McDermott, D. C. Cho, **J. R. Merchan**, R. S. Bhatt, V. Seery, J. L. Mosher, M. B. Farquhar, J. W. Mier, M. B. Atkins, V.P. Sukhatme. A phase II pilot trial of low dose, continuous infusion, or "metronomic", paclitaxel and oral celecoxib in patients with metastatic melanoma. *Journal of Clinical Oncology*, 2006 ASCO Annual Meeting Proceedings Part I. Vol 24, No. 18S (June 20 Supplement), 2006: 8010
 13. **Merchan, JR.**, Tong, C., Takafumi, N., Iankov, I., Russell SJ. Characterization of a novel oncolytic measles virus fully retargeted against the urokinase receptor. In

- vitro and in vivo studies. *2006 American Society of Gene Therapy Meeting, June, 2006.*
14. Alberts SR, Morlan BW, Kim GP, Pitot HC, Quevedo FJ, Dakhil SR, Gross HM, **Merchan JR**, Roberts LR. NCCTG Phases II Trial (N044J) of AZD2171 for Patients with Hepatocellular Carcinoma (HCC) - Interim Review of Toxicity. *ASCO Gastrointestinal Cancer Symposium, 2007.*
 15. **J. R. Merchan**, G. Liu, T.R. Fitch, J. Picus, R. Qin, H.C. Pitot, W. Maples, C. Erlichman. Phase I/II trial of CCI-779 and Bevacizumab in metastatic renal cell carcinoma: Phase I safety and activity results. *ASCO Annual meeting, 2007.*
 16. **JR Merchan**, A Venkatraman, J Macintyre, KK Ciombor, J Levi, A Ribeiro, D Sleeman, A. Flores, M. Vulfovich, CM Rocha-Lima. A pilot study of gemcitabine (g), oxaliplatin (o), cetuximab (c) for locally advanced or metastatic pancreatic cancer. *ASCO GI Symposium, 2008.*
 17. Jaclyn M. Walbroehl, Metin Kurtoglu, Theodore J. Lampidis, **Jaime R. Merchan**. 2-deoxy-D-glucose (2-DG) inhibits angiogenesis by interfering with N-linked glycosylation. *AACR Annual meeting, 2008.*
 18. Guosheng Huang, Rosana Eisenberg, Min Yan, Earl Lawrence, Pingfu Fu, Jaclyn Walbroehl, **Jaime Merchan**, Sanford Markowitz, Balazs Halmos. The HNF3beta-target 15-hydroxyprostaglandin dehydrogenase is a candidate antiangiogenic tumor suppressor in non-small cell lung cancer. *AACR Annual meeting, 2008.*
 19. Seung-Uon Shin, Hyun-Mi Cho, **Jaime Merchan**, Jin Zhang, Joseph D. Rosenblatt. Targeted delivery of an anti-HER2 antibody-human endostatin P125A mutant fusion protein results in enhanced anti-tumor activity in murine and human breast tumor models. *AACR Annual Meeting, 2008*
 20. Yuqi Jing, Tao Sun, Jaclyn Walbroehl, **Jaime Merchan**. Changes in the uPA/PAI-1 balance regulate breast cancer tumorigenesis. *American Society of Gene Therapy Meeting, 2008*
 21. **JR Merchan**, A Venkatraman, J Macintyre, KK Ciombor, J Levi, A Ribeiro, D Sleeman, A. Flores, M. Vulfovich, CM Rocha-Lima. A pilot study of gemcitabine (g), oxaliplatin (o), cetuximab (c) for locally advanced or metastatic pancreatic cancer. *2008 ASCO Annual Meeting.*
 22. H. P. Soares, S. Herna, J. Macintyre, **J. R. Merchan**, J. Levi, D. Sleeman , A. Ribeiro, L. Koniaris, J. Pizzolato, C. M. Rocha-Lima. Does age affect treatment outcome in pancreatic adenocarcinoma? A joint cancer database analysis. *2009 Gastrointestinal Cancers Symposium.*

23. **Jaime R. Merchan**, Henry Pitot, R. Qin, G. Liu, T. Fitch, W. Maples J. Picus, Charles Erlichman Phase I/II trial of CCI 779 and Bevacizumab in advanced renal cell carcinoma: Safety and activity in RTKI refractory RCC patients. *2009 ASCO annual meeting*.
24. U. D. Bayraktar, S. Bayraktar, S. Herna, N. Ku, C. Jones, **J. Merchan**, L. R. Sands, F. Marchetti, A. Montero and C. M. Rocha-Lima Does delay of adjuvant chemotherapy affect the clinical outcome in patients with colon cancer? Vol 27, No 15S (May 20 Supplement), 2009: 4046.
25. Yuqi Jing, **Jaime Merchan**. Changes in Tumor uPA/PAI-1 Balance Regulate Mammary Cancer progression. *2009 AACR annual meeting*.
26. Jing Y., **Merchan, J.R.** Changes in the uPA/PAI-1 axis and breast cancer progression. XII International Workshop on Molecular & Cellular Biology of Plasminogen Activation. 2009. Cold Spring Harbor Lab. Long Island, NY.
27. Jing, Y., Tong, C., Zhang, J., Nakamura, T., Iankov, I., Russell, S.J., **Merchan, J.R.** Targeting activated endothelium and tumor vasculature by an oncolytic measles virus retargeted against urokinase plasminogen receptor. XII International Workshop on Molecular & Cellular Biology of Plasminogen Activation. 2009. Cold Spring Harbor Lab. Long Island, NY.
28. P. J. Hosein, V. H. Pastorini, C. M. Gomez, J. Macintyre, **J. R. Merchan**, A. Ferrell, M. Easey, G. Zayas, P. Bejarano, C. S. Rocha Lima. A phase II trial of nab-paclitaxel (NP) in patients with advanced pancreatic cancer (PC) who have progressed on gemcitabine-based therapy. 2010 ASCO Gastrointestinal Cancers Symposium.
29. Hosein PJ, Lopes Jr GD, Gomez CM, Pastorini VH, Macintyre J, Easey M, Reis IM, **Merchan JR**, Bejarano P, Rocha Lima CM. A phase II trial of nab-paclitaxel (NP) in patients with advanced pancreatic cancer (PC) who have progressed on gemcitabine(G)-based therapy. *J Clin Oncol* 2010; 28(7s): Abstract 4120.
30. Yuqi Jing, Caili Tong, Vittal Kurisetty, Zhijie Jiang, **Jaime Merchan**. Endogenous tumor PAI-1 expression regulates uPA's effects on tumor progression *2010 AACR annual meeting*.
31. Vittal Kurisetty¹, Tony Luongo, **Jaime R Merchan**. Identification of microRNA signatures in Renal Cell Carcinoma Cell Lines. *2010 AACR annual meeting*.
32. Xiaoqi Wang, Guangyuan Li, **Jaime Merchan**, Balazs Halmos. Transcriptional regulation of Cyclooxygenase-2 by Histone Deacetylase Inhibitors in Non-small cell lung cancer cells. *2010 AACR annual Meeting*.

33. Crescent R. Isham, Jennifer D. Tibodeau, **Jaime R. Merchan** and Keith C. Bible. The Thioredoxin Reductase Inhibitor Chaetocin has Potent Antineoplastic Effects in Solid Tumors. *2010 AACR Annual meeting.*
34. Yuqi Jing, Julia Zaias, Krisztina Kovacs, **Jaime Merchan**. Targeting, biodistribution, and in vivo effects of MV-muPA, a novel oncolytic measles virus fully retargeted against uPAR in syngeneic, immunocompetent cancer models. *2011 AACR Annual meeting.*
35. Vittal Kurisetty, Joshua Heiber, Guilherme Perreira, Jarrard Goodwin, Kah Whye Peng, Glen Barber, **Jaime Merchan**. Preclinical safety and efficacy of VSV-IFN- β in a syngeneic, immunocompetent model of head and neck squamous cell carcinoma. *2011 AACR annual meeting.*
36. Vittal Kurisetty, Krisztina Kovacs, Tony Luongo, **Jaime Merchan**. Hsa-miR-20a promotes tumorigenesis in ccRCC cancer cell lines. *2011 AACR Annual meeting.*
37. P. J. Hosein, C. Kawamura, J. Macintyre, A. Loaiza-Bonilla, **J. R. Merchan**, J. U. Levi, C. S. Rocha Lima. Pilot study of neoadjuvant FOLFIRINOX in unresectable locally advanced (LA) pancreatic carcinoma. *J Clin Oncol 29: 2011 (suppl 4; abstr 324).*
38. I. I. Akunyili, C. M. S. Rocha Lima, J. Macintyre, N. Solis, **J. R. Merchan**, D. Sleeman, J. U. Levi, A. Ribeiro. EUS-FNA with rescue FISH for the diagnosis of pancreatic carcinoma in patients with inconclusive on-site pathology. *J Clin Oncol 29: 2011 (suppl; abstr e14641).*
39. **J. R. Merchan**, H. C. Pitot, R. Qin, G. Liu, T. R. Fitch, W. J. Maples, J. Picus, C. Erlichman. Final phase II safety and efficacy results of study MC0452: Phase I/II trial of CCI 779 and bevacizumab in advanced renal cell carcinoma. *J Clin Oncol 29: 2011 (suppl; abstr 4548).*
40. M. Kittaneh, A. J. Montero, K. Kovacs, V. D. Guardiola Amado, A. M. Flores, A. Ferrell, M. Vulfovich, M. D. Pegram, P. W. Benedetto, C. M. S. Rocha Lima, **J. R. Merchan**. Phase I trial of weekly and every 3 weeks ixabepilone (ix) and sunitinib (S) in advanced solid tumors (STs). *J Clin Oncol 29: 2011 (suppl; abstr 3081).*
41. G. L. S. Pereira, G. Castro, **J. R. Merchan**. Oncolytic virotherapy tested in clinical trials: Literature survey from 2001 to 2010 – any progress? *J Clin Oncol 29: 2011 (suppl; abstr e13526).*
42. Yuqi Jing, Krisztina Kovacs, **Jaime R. Merchan**. uPAR-mediated endothelial targeting facilitates endothelial to tumor cell transfer of oncolytic measles virus: In vitro and in vivo studies. *2012 AACR annual meeting.*

43. Kovacs Krisztina, Christina Decatur, Jing Yuqi, Timothy Murray, **Jaime R. Merchan**. The glucose analog 2-DG selectively inhibits AKT and ERK in endothelial cells via interference of N-linked glycosylation and induces endothelial cell apoptosis in vitro and in vivo. *2012 AACR Annual Meeting*.
44. Loaiza-Bonilla, Muaiad Kittaneh, Victor Daniel Guardiola Amado, Krisztina Kovacs, **Jaime R. Merchan**: Preclinical study of cytotoxicity and predictive markers of response to dual inhibition of PI3K and mTORC1/2 signaling by NVP-BEZ235 with or without paclitaxel or nab-paclitaxel as a new therapeutic strategy in pancreatic cancer cell lines. *J Clin Oncol* 31, 2013 (suppl; abstr e15007)
45. Gustavo L. Fernandez, Andrew V. Schally, Tulay Koru-Sengul, Merce Jorda, **Jaime R. Merchan**, Aurea M. Flores, Norman L. Block, Murugesan Manoharan, Aurea M. Flores, Norman L. Block, Murugesan Manoharan, Juergen Engel; Long-term response in a patient with urothelial cancer (UC) treated with AEZS-108. *Bladder Cancer* e15596 *J Clin Oncol* 31, 2013 (suppl; abstr e15596) *J Clin Oncol* 31, 2013 (suppl; abstr e15596).
46. Yuqi Jing, Julia Zaias, Robert Duncan, **Jaime R. Merchan**. Safety, biodistribution and in vivo antitumor effects of uPAR retargeted oncolytic measles virus in syngeneic cancer models. 7th International Conference on Virus Therapeutics, 2013. Quebec, CA.
47. Yuqi Jing, Krisztina Kovacs, **Jaime Merchan**. Demonstration of anti-metastasis activity of oncolytic measles virus retargeting urokinase receptor in experimental breast cancer metastasis model. *ASGCT 16th Annual Meeting*, 2013.
48. Lauren Carcass, **Jaime Merchan**, Caio Rocha Lima The value of tissue phenotype as a predictor in advanced pancreatic ductal adenocarcinoma (PDAC) receiving either Gemcitabine (G) or FOLFIRINOX (F). *AACR special conference on Pancreatic Cancer: Innovations in Research and Treatment*. 2014. New Orleans, LA.
49. Yuqi Jing, Julia Zaias, **Jaime R. Merchan**. In vivo anti-metastatic effects of uPAR retargeted oncolytic measles virus. *AACR Annual Meeting*, Apr 4-9, 2014.
50. Krisztina Kovacs, Christina Decatur, Dien G. Pham, Huaping Liu, Yuqi Jing, Timothy G. Murray, Theodore J. Lampidis, **Jaime R. Merchan**. 2-Deoxy-glucose downregulates endothelial Akt and Erk via interference with N-linked glycosylation, induction of endoplasmic reticulum stress, and GSK-3 β activation. *AACR Annual Meeting*, April 18-22, 2015
51. Yuqi Jing, Marcela Toro Bejarano, Krisztina Kovacs, **Jaime Merchan**. Stromal selective targeting by uPAR retargeted oncolytic measles virus inhibits breast cancer progression. *AACR Annual Meeting*, April 18-22, 2015.

52. Marcela M. Toro Bejarano, Yuqi Jing, Krisztina Kovacs, **Jaime Merchan**. uPAR mediated endothelial targeting by oncolytic measles virus . AACR Annual Meeting, April 18-22, 2015.
53. Yuqi Jing, Julia Zaias, **Jaime Merchan**. Tumor fibroblast targeting via uPAR retargeted measles virus: *In vitro* and *in vivo* effects. AACR Annual meeting, April 16-20, 2016.
54. Rosenberg, J. E., Heath, E., Perez, R., **Merchan, J.**, Lang, J., Ruether, D., ... & Gartner, E. (2016). Interim analysis of a phase I dose escalation trial of ASG-22CE (ASG-22ME; enfortumab vedotin), an antibody drug conjugate (ADC), in patients (Pts) with metastatic urothelial cancer (mUC). *Annals of Oncology*, 27(suppl 6), 788P.
55. Rasco, D., Peterson, C., Mazhari, R., Benaim, E., & Merchan, J. (2016). RX-3117, an oral antimetabolite to treat advanced solid tumors (ST): Phase 1 and ongoing phase 2a results. *Annals of Oncology*, 27(suppl 6), 396P.
56. Rosenberg, J.E., Heath, E.I., Van Veldhuizen, P.J., Merchan, J.R., Lang, J.M., Ruether, J.D., Petrylak, D.P., Sangha, R.S., Smith, D.C., Sridhar, S.S. and Gartner, E.M., 2016, May. Anti-tumor activity, safety and pharmacokinetics (PK) of ASG-22CE (ASG-22ME; enfortumab vedotin) in a phase I dose escalation trial in patients (Pts) with metastatic urothelial cancer (mUC). In *ASCO Annual Meeting Proceedings* (Vol. 34, No. 15_suppl, p. 4533).

20. Other Works accepted for Publication:

N/A

V. PROFESSIONAL

21. Funded Research Performed

CURRENT

1-R01-CA-149659-01-A1 (Merchan, Jaime) 2/1/11 - 6/31/17 (NCE) 25%
 NIH-NCI (Role: Principal Investigator)
 Annual Direct Cost:\$207,500.00
 Total Direct Cost (All Years):\$1,037,500.00
 Annual Total Cost:\$317,475.00
 Total Cost (All Years):\$1,587,375.00
 Tumor and Stromal Targeting by Oncolytic Viruses
 The overall objective of this application, is to characterize the specificity and therapeutic effects of tumor stromal and vascular targeting of oncolytic measles viruses via the urokinase receptor (with a virus called MV-uPA), a critical

tumor/stromal cell surface glycoprotein. **Impact/priority score: 25; Percentile: 10**

3RO1 CA 149659-02 Merchan (PI) 4/01/12-3/31/15
NIH/NCI

Tumor and Stromal Targeting by Oncolytic Viruses
Administrative Supplement
Annual total cost: \$ 25,000
Total cost (all years): \$ 75,000

3RO1 CA 4149659-04S1 9/22/14-8/30/15
NIH/NCI

Tumor and Stromal Targeting by Oncolytic Viruses
Diversity Supplement
Annual total cost: \$ 63,492
Total cost (all years): \$ 75,000

N01CM62205-6-0-1 Erlichman (PI) 09/23/11 – 09/22/16 5%
NIH-NCI/ Mayo Clinic Phase 2 Consortium

Early Therapeutics Development with Phase II Emphasis
Total Costs: \$ 60,000

Goal: To conduct Phase 2 clinical trials of NCI-sponsored agents, evaluate biologic effects of these agents on their molecular targets, evaluate other relevant biologic effects and determine clinically relevant outcomes/correlates.

Role: Site Principal Investigator (U. of Miami)

WCA Grant 2013

Women's Cancer Association 6/01/13-5/29/15 (NCE) 2%

Role: Principal Investigator

Total Cost: \$ 50,000

Oncolytic Virotherapy Strategies for Pancreatic Cancer

The goals of this proposal are to characterize of various oncolytic viral platforms in pancreatic cancer in vitro and in vivo.

EPROST 20140634 10/13/14-10/12/18

Rexahn Pharmaceuticals

A Phase I, open label, dose-ranging, safety and pharmacokinetic study to determine the maximum tolerated dose of RX-3117 Administered orally as a single agent to Subjects with Advanced Malignancies.

Goal: To determine safety, and MTD of RX-3117, a novel cytidine analog in patients with advanced cancer.

Role: Site PI

EPROST 20140090 7/23/14-7/22/18

Agensys

A Phase 1 Study of the Safety and Pharmacokinetics of escalating Doses of ASG-22CE Given as Monotherapy in Subjects with Metastatic Urothelial Cancer and Other Malignant Solid Tumors that Express Nectin-4

Goal: To evaluate the safety and pharmacokinetics ASG-22CE as well as assess the immunogenicity and antitumor activity in subjects with metastatic urothelial cancer and other malignant solid tumors.

Role: Site PI

EPROST 20140394 7/16/14-7/15/18

Eli Lilly

Phase 1 Study of LY3039478 in Patients with Advanced or Metastatic Cancer

Role: Site PI

EPROST 20140820 3/05/14-3/01/17

Acceleron Pharma

A Phase 2 Randomized, Double-Blind Study of Dalantercept plus Axitinib Compared to Placebo plus Axitinib in Patients with Advanced Renal Cell Carcinoma

EPROST 20160019 6/01/16-5/31/20

TOCAGEN

A Phase 1b Study Of Toca 511, A Retroviral Replicating Vector, Combined With Toca FC In Subjects With Solid Tumors

Role: National PI

EPROST 20160381 4/06/16-4/05/20

Novartis

A Phase 1/2 Study of Safety and Efficacy of Ribociclib (LEE011) in Combination with Trametinib (TMT212) in patients with Metastatic or Advanced Solid Tumors

Role: Site PI

EPROST 20160333 7/19/16-7/18/20

Eli Lilly

A Phase 1b Study of LY3039478 in Combination with Other Anticancer Agents in Patients with Advanced or Metastatic Solid Tumors

Role: PI

COMPLETED

Young Investigator Award

7/1/01 – 6/30/02

ASCO

PI: Jaime R. Merchan

Uncovering the antiangiogenic potential of human plasma.

Pfizer Fellowship

7/1/01 – 6/30/03

Harvard/MIT Health Sciences and Technology/Pfizer
PI: Jaime R. Merchan
Uncovering the antiangiogenic potential of human plasma.

National Cancer Institute (R21) 5/01/03- 4/30/05
PI: Vikas P Sukhatme
"Combination Antiangiogenic Therapy for Advanced Melanoma: Quick Trials for Novel Cancer Therapies"
Role: co-investigator

Pfizer #112; 1A5255 7/01/04 – 6/30/06
"A Pivotal Study of SU11248 in the Treatment of Patients with Cytokine Refractory Renal Cell Carcinoma
Site PI: Jaime R. Merchan, MD (5% effort)

Fraternal order of Eagles 7/01/05- 6/30/06
Eagles Pilot Award
uPAR Dependent Cell Fusion: A novel antitumor strategy
PI: Jaime Merchan

Goodwin #1-03P15 8/01/05 – 12/31/06
Commonwealth Cancer Foundation
Biomarkers of VEGF and mTOR Blockade in Advanced Renal Cancer
PI: Jaime Merchan

700630 (Merchan, Jaime) 7/1/07 - 6/30/08 15%
BFBCI Developmental Grant/SCCC (Role: Principal Investigator)
Total Direct Cost (All Years):\$50,000.00
Total Cost (All Years):\$ 50,000.00
Redefining the Role of Plasminogen Activators & Inhibitors in Breast Cancer Progression

BCTR0503970 (Merchan, Jaime) 5/1/06 - 4/30/09 5%
Susan Komen (Role: Principal Investigator)
Total Direct Cost (All Years):\$199,516.00
Total Cost (All Years):\$249,395.00
The Plasminogen Activator System as a Target for Breast Cancer Virotherapy
Primary goal: To develop oncolytic viruses with target specificity re-directed to the uPA receptor, as novel therapeutic agents against breast cancer. To assess the effects of a mutant urokinase as an antitumor agent

5-R21-CA-119545-02 (Merchan, Jaime) 9/19/06 - 8/31/09 26%
NIH-NCI (Role: Principal Investigator)
Annual Direct Cost:\$0.00
Total Direct Cost (All Years):\$295,857.00
Annual Total Cost:\$0.00

Total Cost (All Years):\$452,098.32

Biomarkers for VEGF and mTOR Blockade in Advanced Renal Cancer
Our long term goals are to identify and validate biomarkers predictive of clinical benefit as well as markers that can be used as surrogate endpoints of activity and toxicity in patients with advanced renal cell cancer treated with antiangiogenic therapies. **Priority score: 136 (3.4 percentile)**

700613 (Merchan, Jaime) 6/1/07 - 5/31/09 10%

Stanley Glaser (Role: Principal Investigator)

Total Direct Cost (All Years):\$25,000.00

Annual Total Cost:\$0.00

Total Cost (All Years):\$25,000.00

Development of a Novel Oncolytic Virus Retargeted to Tumor and Stromal Cells

304507 (Merchan Jaime) 6/01/08 – 5/31/10 10%

SCCC/PAP Corps PO1 Developmental Grant

(Role: Principal investigator on project 5: “*Angiogenesis inhibition by interference of glucose metabolism*”)

Annual Direct Cost: \$ 40,000.00

Total Direct Cost (All Years):\$80,000.00

Annual Total Cost:\$40,000.00

Total Cost (All Years):\$80,000.00

Overall Project title: “*Targeting Glycolysis and Glycosylation to Improve Treatment Efficacy in Various Tumor Types*” (PI: Ted Lampidis).

HN-SN2-61-20062200-5C (Erlichman, Charles) 11/1/06 - 12/31/10 1%

NIH-NCI (Role: Principal Investigator)

Annual Direct Cost:\$0.00

Total Direct Cost (All Years):\$55,187.00

Annual Total Cost:\$0.00

Total Cost (All Years):\$70,057.89

“*A Phase I/II Clinical Trial of CCI-779 and Bevacizumab in Stage IV Renal Cell Carcinoma*”

SCCC2008065 (Merchan, Jaime) 8/20/08 - 8/20/12 3%

Glaxo/ Smithkline (Role: Principal Investigator)

Annual Direct Cost:\$119,108.50

Total Direct Cost (All Years):\$476,434.00

Annual Total Cost:\$148,707.50

Total Cost (All Years):\$594,830.00

A Study of Pazopanib versus Sunitinib in the Treatment of Subjects with Locally Advanced and/or Metastatic Renal Cell Carcinoma

The primary objective is to compare progression-free survival of subjects treated with pazopanib to those treated with sunitinib

09BR01 7/1/09 - 6/30/13 (no cost extension) 5%
 Bankhead-Coley (Role: Co-Investigator. Overall PI: J. Goodwin)
 Annual Direct Cost:\$60,886.00
 Total Direct Cost (All Years):\$147,298.00
 Annual Total Cost:\$66,974.60
 Total Cost (All Years):\$162,027.80
 Preclinical and Clinical Development of VSV-IFN for the Treatment of
 Advanced Head and Neck Cancer (Project 1).
 The goals of the proposal are to assess the safety and antitumor activity of
 VSV-IFN β in syngeneic (rodent) models of HNSCC, which will serve as the
 basis for development of a phase I clinical trial of this agent in patients with
 advanced HNSCC

GA6181ZB (Merchan, Jaime) 11/6/08 - 12/15/15 3%
 Pfizer (Role: Principal Investigator)
 Annual Direct Cost:\$68,087.66
 Total Direct Cost (All Years):\$204,262.98
 Annual Total Cost:\$85,024.16
 Total Cost (All Years):\$255,072.48
 A Phase I Trial of Weekly and Every Three Weeks Ixabepilone and Sunitinib
 in Solid Tumor Patients
 To determine the recommended Phase II dose of ixabepilone for the two dose
 schedules (weekly and once every three weeks) in combination with a fixed
 dose of sunitinib, in patients with solid tumors. To evaluate the
 pharmacokinetic profile, obtain preliminary efficacy data and an estimate of
 optimal biological dose of the combination in an exploratory manner, for both
 dose schedules.

CA163159 (Merchan, Jaime) 11/6/08 - 11/6/15 3%
 Bristol-Myers (Role: Principal Investigator)
 Annual Direct Cost:\$48,636.25
 Total Direct Cost (All Years):\$194,545.00
 Annual Total Cost:\$60,731.25
 Total Cost (All Years):\$242,925.00
 A Phase I Trial of Weekly and Every Three Weeks Ixabepilone and Sunitinib
 in Solid Tumor Patients (Investigator initiated trial)
 To determine the recommended Phase II dose of ixabepilone in a weekly
 (Schedule A) and once every three weeks (Schedule B) schedules and daily
 sunitinib in patients with solid tumors. To evaluate the pharmacokinetic
 profile, obtain preliminary efficacy data and an estimate of optimal biological
 dose of the combination in an exploratory manner, for both dose schedules.

22. Editorial Responsibilities

Member of Editorial Board:

12/2010 – present: Vascular Cell

Reviewer for the following journals:

Annals of Oncology
Journal of Clinical Oncology
Cancer Research
Clinical Cancer Research
Oncology
Molecular Therapy
Breast Cancer Research and Treatment
Clinical Advances in Hematology and Oncology
Bioorganic & Medicinal Chemistry
Cancer Investigation
Investigational New Drugs
Expert Opinion on Pharmacotherapy
Journal of Targeted Therapies in Cancer

23. Professional And Honorary Organizations

1994-2002	American College of Physicians/American Society of Internal Medicine (member).
1998-2000	American Society of Hematology (Associate member)
1998-Present	American Society of Clinical Oncology (full member)
1998-2005	Massachusetts Medical Society (member)
2000-present	American Association for Cancer Research (full member)
2003-2006	Member, North Central Cancer Treatment Group (NCCTG)
2006	Co-Leader, NCCTG translational research coordinating committee- Angiogenesis
2006-present	American Society of Gene Therapy

24. Honors/Awards

1985-1991	Recognition Diplomas for Academic Excellence during Medical School
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1992	Catholic University School of Medicine Award for the Best Doctoral Thesis
1997-1998	Chief Medical Resident, University of Miami School of Medicine
2001-2003	Pfizer Fellowship in the Clinical Investigator Training Program
2001-2002	American Society of Clinical Oncology Young Investigator Award
2005	Susan G. Komen Breast Cancer Foundation Award
2005	Eagles Pilot Award
2007	Stanley J. Glaser Research Award
2007	Selection into the American Association of Cancer Research Database of Exceptional Minority Scientists
2010	BFBCI Bankhead Coley Breast Cancer SPORE planning grant career development award.
2011	Reviewer, NIH: IMST-11 Small Business review panel (study section)
2014	Reviewer NIH. Developmental Therapeutics Study Section.
2015	Chartered Member , Developmental Therapeutics Study Section, National Institutes of Health.

25. Post-doc Fellowships

7/2001-6/2003	Fellow, the Clinical Investigator's Training Program. Harvard Medical School-Massachusetts Institute of Technology Division of Health Sciences and Technology
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26. Other Professional Activities: Presentations At Regional, National And International Meetings And Invited Talks

International

1993	International Congress of the Pan American Medical
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Association. Acute Severe Hyperuricemia induced by Pyrazinamide: Case Report and Review of the Literature. Guayaquil, Ecuador

- 2001 National Cancer, Institute, Rio de Janeiro, Brazil: *Tumor Angiogenesis, Basic Concepts and Clinical Implications*. Invited speaker
- 2006 *Novel Therapies for Renal Cell Carcinoma*. Guayaquil, Ecuador. Invited Speaker.
- 2009 XII International Workshop on Molecular & Cellular Biology of Plasminogen Activation: Targeting activated endothelium and tumor vasculature by an oncolytic measles virus retargeted against urokinase plasminogen receptor. 2009. Cold Spring Harbor Lab. Long Island, NY.
- 2013 7th International Conference on Virus Therapeutics, 2013. Poster Presentation. Quebec, CA. Safety, biodistribution and in vivo antitumor effects of uPAR retargeted oncolytic measles virus in syngeneic cancer models.
- 2014 II International Symposium on Gastrointestinal Tumors: Invited Faculty: Locoregional approach of unresectable hepatic metastases: TACE x IRE x Nanoknife x Ablation.
- 2014 II International Symposium on Gastrointestinal Tumors: Invited Faculty: Systemic Adjuvant treatment of rectal cancer after chemoradiotherapy: when should it be indicated, and which regimen should be used?
- 2015 9th International Conference on Oncolytic Virus Therapeutics Boston 2015: “Stromal Selective Targeting by murine uPAR retargeted oncolytic measles virus delays breast cancer progression”.
- 2016 Urologic Oncology Symposium: Systemic therapy of advanced bladder cancer: Role of immunotherapy. Colombian Association of Hematology-Oncology. Bogota, Colombia (9/23-24, 2016)
- 2016 Urologic Oncology Symposium: Management of Advanced Renal Cell Carcinoma. Sequencing Therapies. Colombian Association of Hematology-Oncology. Bogota, Colombia (9/23-24, 2016).

National

- 2001 American Association for Cancer Research Annual Meeting: *Plasminogen Activators and Captopril generate Antiangiogenic Activity in Vitro*. New Orleans, LA (oral poster presentation).
- 2004 American Association for Cancer Research Annual Meeting: *Protease Activity of Urokinase Delays Tumor Progression and Prolongs Survival in a Syngeneic Breast Cancer Model, Orlando, FL* (oral poster presentation).
- 2004 Mayo Clinic Angiogenesis Symposium: From Bench to Bedside to Bench. Rochester, MN: *Clinical Studies with Small Molecule Inhibitors of Angiogenesis Signaling* (speaker).
- 2005 The third annual NCCTG patient advocate symposium. Rochester, MN. *Angiogenesis: An overview for the non-scientist* (speaker).
- 2005 15th Annual Hematology/Oncology Reviews. State of the Art Treatment of Hematological/Oncological Disorders: *Renal Cancer: Novel Therapeutic options* (Invited Speaker) Amelia Island, FL.
- 2006 Spring 2006 NCI CTEP Early Drug Development Meeting. National Institutes of Health, Bethesda, MD: *CCI 779 and Bevacizumab in RCC* (Invited speaker).
- 2006 American Society of Gene Therapy Meeting (June 2006). Baltimore, MD: *Characterization of a novel oncolytic measles virus fully retargeted against the urokinase receptor. In vitro and in vivo studies* (Oral presentation).
- 2006 Emerging Trends in Oncology: A Post ASCO update (July 2006): *Kidney Cancer: Recent Advances*. Sofitel Hotel. Minneapolis, MN (Distinguished Faculty Member).
- 2007 2007 ASCO Annual Meeting: *Phase I/II trial of CCI 779 and Bevacizumab in advanced renal cell cancer. Phase I safety and efficacy results*. Chicago, IL.
- 2009 2009 American Society of Clinical Oncology Annual Meeting. A phase I/II trial of CCI 779 and Bevacizumab for

patients with stage IV renal cell carcinoma: Safety and activity in RTKI refractory patients. Poster Discussion presenter. Orlando, FL.

- 2011 2011 American Society of Clinical Oncology Annual Meeting. Presenter, poster discussion session: *Final phase II safety and efficacy results of study MC0452: Phase I/II trial of CCI 779 and bevacizumab in advanced renal cell carcinoma.*
- 2011 2011 American Society of Clinical Oncology Annual Meeting. Poster Presentation. Phase I trial of weekly and every 3 weeks ixabepilone (ix) and sunitinib (S) in advanced solid tumors (STs).
- 2012 2012 American Society of Cancer Research Meeting. Poster Presentation. UPAR-mediated endothelial targeting facilitates endothelial to tumor cell transfer of oncolytic measles virus: In vitro and in vivo studies.
- 2012 2012 American Society of Cancer Research Meeting. Poster Presentation. The glucose analog 2-DG selectively inhibits AKT and ERK in endothelial cells via interference of N-linked glycosylation and induces endothelial cell apoptosis in vitro and in vivo.
- 2013 American Society of Gene and Cell Therapy 16th Annual meeting. Poster presentation. . Demonstration of anti-metastasis activity of oncolytic measles virus retargeting urokinase receptor in experimental breast cancer metastasis model.
- 2014 AACR special conference on Pancreatic Cancer: Innovations in Research and Treatment. 2014. New Orleans, LA. The value of tissue phenotype as a predictor in advanced pancreatic ductal adenocarcinoma (PDAC) receiving either Gemcitabine (G) or FOLFIRINOX (F).
- 2014 American Association of Cancer Research Annual Meeting. Poster Presentation. In vivo anti-metastatic effects of uPAR retargeted oncolytic measles virus.
- 2015 American Association of Cancer Research Annual Meeting. Poster Presentation. 2-Deoxy-glucose down regulates endothelial Akt and Erk via interference with N-

linked glycosylation, induction of endoplasmic reticulum stress, and GSK-3 β activation.

- 2015 American Association of Cancer Research Annual Meeting. Poster Presentation. Stromal selective targeting by uPAR retargeted oncolytic measles virus inhibits breast cancer progression.
- 2015 American Association of Cancer Research Annual Meeting. Poster Presentation: uPAR mediated endothelial targeting by oncolytic measles virus.

Regional

- 1996 American College of Physicians Associates Meeting: *An unusual case of Fulminant Hepatic Failure*. Tampa, FL
- 2004 Phase 2 Consortium Retreat. Bloomington, MN: *P2C Opportunities. MC0452: A Phase I/II study of CCI-779 and Bevacizumab in Metastatic Renal Cell Carcinoma* (speaker).
- 2002 Mayo Clinic, Rochester, Minnesota: *Antiangiogenic Strategies for the Treatment of Cancer: From Concept to Clinic Trials*. Invited speaker
- 2004 VEGF Educational Resource Network symposium: *VEGF: Biology and Rationale as Therapeutic Target*. Radisson Hotel, Rochester, MN (Speaker)
- 2005 University of Miami/Sylvester Comprehensive Cancer Center. Miami, FL: *Angiogenesis and antiangiogenesis: From bench to bedside to bench* (Invited speaker).
- 2005 Case Western Reserve University/Ireland Cancer Center, Cleveland, OH: *Bench to Bedside Strategies for Angiogenesis Inhibition* (Seminar).
- 2005 Duke University Cancer Center, Durham, NC: *Bench to Bedside Strategies for Angiogenesis Inhibition* (Seminar).
- 2006 2006 UM/Sylvester Cancer Center Research Retreat: *Targeting Oncolytic Viruses Against Tumor Vasculature*. Hawk's Cay Resort, FL (Speaker).

- 2006 2006 UM/Sylvester Cancer Center Research Retreat: *Phase I Clinical Trial Initiative*. Hawk's Cay Resort, FL (Speaker)
- 2007 2007 University of Miami/Sylvester Cancer Center Hematology-Oncology Division Meeting: *Renal Cell Cancer: Novel therapeutic options*. Chicago, IL.
- 2008 2008 Annual Miami Cancer Meeting: *Angiogenesis in Gastrointestinal Malignancies*. Distinguished Faculty Member
- 2009 Annual Miami Cancer Meeting: Challenging cases in Pancreatic Cancer. Distinguished faculty member/panel discussant.
- 2011 Annual Miami Cancer Meeting: Targeted therapy for Renal Cell Carcinoma: State of the Art. Distinguished faculty member.
- 2012 76 annual meeting of the Southeastern Section of the American Urological Association. Invited speaker: *Systemic Therapy for Renal Cancer: AN update on the role of the medical oncologist*.
- 2012 Synergy Miami 2012. Invited Speaker: *NIBs in Renal Cell Carcinoma*.
- 2013 10th. Annual Miami Cancer Meeting (MCM). Distinguished Faculty: Targeted Therapy for Renal Cell Carcinoma: State of the Art.
- 2013 Synergy Miami 2013. Invited Speaker: Medical Oncology Management of *Renal Cell Carcinoma*.
- 2014 11th Annual Miami Cancer Meeting. Distinguished Faculty. Targeted Therapy for RCC: State of the Art.
- 2014 Synergy Miami 2014: Faculty. Metastatic Renal Cell Carcinoma Management
- 2015 12th Annual Miami Cancer Meeting. Distinguished faculty: Targeted Therapy for Renal Cell Carcinoma: How can we customize treatment for each patient?

VI. TEACHING

27. Teaching Awards Received: N/A

28. Teaching Specialization

Educational/Professional Teaching Activities

1987-1988	Biochemistry Laboratory Course: Teaching Assistant, Universidad Catolica de Santiago de Guayaquil. 1-3 hour workshop/week. Thirty-thirty five medical students/year.
1989-1991	Neuroanatomy Course: Teaching Assistant, Universidad Catolica de Santiago de Guayaquil. Two- one hour sessions (lectures and workshops) per week. Thirty-five-forty medical students/year.
1997-1998	Medical Service: Attending Physician, Department of Medicine. University of Miami School of Medicine/VA Medical Center (21 hours/week, 4 months/year; three medical residents, 2 medical students.
2002- 2003	Hematology/Oncology outpatient clinics, Beth Israel Deaconess Medical Center: Attending Physician, (8 hours/week, 2 - first year hematology-oncology fellows).
2003- 2006	Medical Oncology Inpatient Services, Methodist Hospital, Mayo Clinic Rochester. Consultant (40 hours/week, four weeks/year): 2 Hematology-Oncology Fellows, 4 Medical Residents.
2003- 2006	Medical Oncology Inpatient Consults (St Mary's/Methodist Hospitals; 40 hours/week, 2 weeks/year): Two Oncology fellows.
2004	Faculty, the VEGF Educational Resource Network: Educational Lecture regarding tumor angiogenesis to fellows and oncologists.
2006-	Medical Oncology Inpatient Service (Jackson Memorial Hospital). 40 hours/week, 4 weeks/year. One oncology fellow, 4 medical residents, 2 medical students.
2006-	Medical Oncology Inpatient Consults (Jackson Memorial Hospital). 40 hours/week, 4 weeks/year. One oncology fellow, 1-2 medical students.

2006-	Medical Oncology Clinics (Sylvester Comprehensive Cancer Center. Attending Physician (10 hours/week).
2007-	Medical Oncology Outpatient Clinics (Jackson Memorial Hospital). Attending Physician (5 hours/week, 3 months/year). 4-5 Oncology Fellows.
2009-2011	Speaker for CME activities (grand rounds and morning reports series, within and outside Florida) related to Renal Cell Carcinoma: “Advanced Renal Cell Carcinoma: Molecular Pathways and Clinical Applications” and “RCC: Continuing to Refine the Role of Targeted Therapies

Courses Taught

2007-	Hematology-Oncology Course Curriculum lectures to Hematology-Oncology Fellows: Management of Renal Cell Carcinoma, Pancreatic Cancer and Neuroendocrine tumors
2008-2009	Journal Club Cell Biology: Focus on tumor angiogenesis
2010-present	Cancer Biology seminars: Dialogues with Cancer Clinicians: Targeting Angiogenesis in the clinic.

29. Thesis And Dissertation Advising/Postdoc Student Supervisor

Thesis and Dissertation Committee Member for The Following Doctoral Students:

Lucas Cavalin (Graduated in 2010).
 Joshua Heiber (Graduated in 2011)
 Katherine Phillips (Graduated in 2013). **Role:** Physician mentor
 Salma Parvin (current Doctoral Student). **Role:** Physician mentor.
 Dillon Betancourt (current Doctoral student)
 Santos Rosario (current doctoral fellow). **Role:** Physician Mentor

Mentoring Activities

Current:

Postdoctoral fellows:

Yuqi Jing, PhD. Projects:

- Tumor and Stromal Targeting by Oncolytic Viruses.
- Protease-Antiprotease regulation of cancer progression.

Valery Chavez, PhD. Projects:

- Combination therapies for renal cell carcinoma and pancreatic cancer
- Novel strategies to enhance oncolytic virus efficacy

Post-Bacc Student

Marcela Toro (Currently on a Minority Supplement award from NCI)

- uPAR mediated oncolytic virus vascular targeting

Past:

Postdoctoral fellows/Research Associates:

Krisztina Kovacs, PhD. Projects. Current Position. Research Associate, University of Miami (N. Merchant Lab)

Vittal Kurisetti, PhD. Current Position: Research Associate. Texas Tech University Health Sciences Center. El Paso, TX

Jaclyn Walbroehl, MS. Current Position: DO. Internal Medicine. Private Practice

Jin Zang, MS. Current Position: Staff Development Scientist at Beckman Coulter, Inc.

Clinical Fellows:

Current:

Wungki Park: Novel strategies to overcome resistance to antiangiogenic agents. Oncolytic virotherapy approaches to treat cancer.

Past:

Victor Guardiola, MD. Current Position: Private Practice in Oncology

Muaiad Kittaneh, MD. Current position: Assistant Professor. Karmanos Cancer Institute/Wayne State University. Phase I service. Center for Experimental Therapeutics, Detroit MI

Jennifer Cudris, MD. Current Position: Faculty Member at the Universidad Javeriana, Bogota, Colombia

Arturo Loaiza Bonilla, MD: Current Position: Assistant Professor. Division of Hematology/Oncology. University of Pennsylvania.

VII. SERVICE

30. University Committee and Administrative Responsibilities

1997-1998	Internship Selection Committee, University of Miami/Jackson Memorial Medical Center.
2002-2003	Fellowship Selection Committee, Beth Israel Deaconess Medical Center
2003-2006	Member, Mayo Clinic Cancer Center Protocol Review Committee
2003-2006	Member, Mayo Cancer Center Phase I Program
2004-2006	Member, Mayo Clinic Phase II consortium
2006-	Member, Sylvester Comprehensive Cancer Center
2006-	Co-Director, University of Miami/Sylvester Comprehensive Cancer Center Phase I Program
2007-	Member, Clinical Research Services Oversight Committee, Sylvester Comprehensive Cancer Center
2007-	Member, Fellowship Advisory Committee. University of Miami Miller School of Medicine
2008-	Member and grant reviewer, American Cancer Society Institutional Research Grant Committee.
2011-	Mayo Phase 2 Consortium: Principal Investigator (U of Miami site).
2014	Co-Leader, Experimental Therapeutics Program, Sylvester Comprehensive Cancer Center
2015	Director, Phase I Program, Sylvester Comprehensive Cancer Center
2015	Member, SCCC Scientific Steering Committee

31. Community Activities: N/A