

## Curriculum Vitae

1. **Date:** March 6, 2014

### PERSONAL

2. **Name:** Rakesh Singal, M.D., M.R.C.P. (U.K.)

3. **Home Phone:**

4. **Current Academic Rank:** Associate Professor (tenured)

5. **Primary Department:** Medicine

6. **Citizenship:** USA

7. **Visa Type (if non-citizen):**

### HIGHER EDUCATION

8. **Institutional (institution; degree; date conferred):**

University of Delhi, India

Doctor of Medicine (Internal Medicine)

May 1987

Bachelor of Medicine and Bachelor of Surgery

December 1983

9. **Non-Institutional (description; dates):**

Royal College of Physicians (U.K.)

Membership of the Royal Colleges of Physicians  
of the United Kingdom (MRCP)

June 1990

10. **Certification, licensure (description; board or agency; dates):**

Board certified in hematology

valid till December 2011

Board certified in medicine

valid till December 2017

Board certified in medical oncology

valid till December 2017

#### *Licensure*

Florida Medical Board

valid till January 2015

General Medical Council, U.K.

August 1992 (valid indefinitely)

Medical Council of India

August 1984 (valid indefinitely)

### EXPERIENCE

11. **Academic (institutions; rank/status; dates):**

***Professional experience***

Associate Professor of Medicine Division of Hematology/Oncology	6/03 to date
Associate Professor of Molecular and Cellular Pharmacology University of Miami, Miami (tenured 6/1/06)	6/04 to date
Staff Physician, Miami VA Medical Center, Miami	6/03 to 6/07
Associate Professor of Medicine, Section of Hematology/Oncology Feist-Weiller Cancer Center, LSU Health Sciences Center, Shreveport	05/02 to 05/03
Assistant Professor in Medicine, Section of Hematology/Oncology Feist-Weiller Cancer Center, LSU Health Sciences Center, Shreveport	11/98 to 05/02
Staff Physician in Hematology/Oncology Overton Brooks VA Medical Center, Shreveport	11/98 to 05/03
Fellow in adult Medical Oncology & Hematology University of Minnesota, Minnesota	07/94 to 06/98
Resident in Internal Medicine Metro Health Medical Center, Cleveland, Ohio	06/92 to 06/94

***Overseas Professional Experience***

Registrar in Hematology	09/90 to 06/92
Sheffield Health Authority, United Kingdom. 1. Royal Hallamshire Hospital, Glossop Road, Sheffield S10 2JF, U.K. 2. Northern General Hospital, Herries Road, Sheffield, U.K.	
Personal Study	08/90
Senior House Officer in Hematology University Hospital, Nottingham NG7 2UH, U.K.	02/90 to 07/90
Senior House Officer in General Medicine	08/89 to 01/90

East Birmingham Hospital, Birmingham B9 5ST, U.K.

Senior House Officer in General Medicine 01/89 to 07/89  
Inverclyde Royal Hospital, Greenock PA16 OXN, U.K.

Senior Resident in General Medicine 10/87 to 09/88  
All India Institute of Medical Sciences, Ansari Nagar  
New Delhi 110029, INDIA

II & III Year Junior Resident in General Medicine 07/85 to 07/87  
Smt. Sucheta Kriplani Hospital, New Delhi, INDIA

Assistant Divisional Medical Officer 01/85 to 05/85  
Northern Railways, Baroda House, New Delhi, INDIA

I Year Junior Resident in General Surgery 07/84 to 12/84  
GB Pant Hospital, New Delhi, INDIA

I Year Junior Resident in General Medicine 01/84 to 06/84  
LNJPN Hospital, New Delhi, INDIA

**14. Non-Academic (employers; title; responsibilities; dates):**

**15. Military (branch; rank; responsibilities; dates):** None

**PATENTS and INVENTIONS**

U.S. Provisional Application Serial No. 60/845,528

Franzmann and **Singal**

Hypermethylation of CD44 promoter in head and neck squamous cell carcinoma

**PUBLICATIONS [author(s) (in actual precedence of authorship); title; publisher or journal name; date (current year first); page numbers]**

**16. Books and monographs published:**

- Ramachandran K, Gordian E, **Singal R.** (2008). DNA methylation in tumor diagnosis. In: Tollefsbol, T (ed.) CRC Press (Taylor & Francis Group), (ISBN 9781420045796): p319-332.
- **Singal R** (2008) 'Metastatic Prostate Cancer' in Prostate Cancer (Edited by Abdel-Wahab and Silva)
- **Singal R** (2008) 'Chemoprevention' in Prostate Cancer (Edited by Abdel-Wahab and Silva)

**17. Juried or refereed journal articles and exhibitions:**

1. Ramachandran K, Speer CG, Fiddy S, Reis IM, Singal R. Free circulating DNA as a biomarker of prostate cancer: comparison of quantitation methods. *Anticancer Res.* 2013 Oct;33(10):4521-9.
2. Eldefrawy A, Soloway MS, Katkooori D, **Singal R**, Pan D, Manoharan M. Neoadjuvant and adjuvant chemotherapy for muscle-invasive bladder cancer: The likelihood of initiation and completion. *Indian J Urol.* 2012 Oct;28(4):424-6. doi: 10.4103/0970-1591.105756. PMID: 23449818
3. Ramachandran K, **Singal R.** DNA methylation and field cancerization. *Epigenomics.* 2012 Jun;4(3):243-5
4. Ramachandran K, Gordian E, Singal R. 5-azacytidine reverses drug resistance in bladder cancer cells. *Anticancer Res.* 2011 Nov;31(11):3757-66.
5. Albany C, Alva AS, Aparicio AM, **Singal R**, Yellapragada S, Sonpavde G, Hahn NM. Epigenetics in prostate cancer. *Prostate Cancer.* 2011;2011:580318. Epub 2011 Nov 30.
6. Alva AS, Hahn NM, Aparicio AM, **Singal R**, Yellapragada S, Sonpavde G. Hypomethylating agents for urologic cancers. *Future Oncol.* 2011 Mar;7(3):447-63. Review.
7. Methylation-mediated silencing of TMS1 in pancreatic cancer and its potential contribution to chemosensitivity. Ramachandran K, Miller H, Gordian E, Rocha-Lima C, **Singal R.** *Anticancer Res.* 2010 Oct;30(10):3919-25.
8. Talebi TN, Manoharan M, **Singal R.** Resolution of Thrombocytopenia Secondary to Disseminated Intravascular Coagulation With Docetaxel Chemotherapy in Prostate Cancer. *Am J Ther.* 2010.
9. Gordian E, Ramachandran K, Reis IM, Manoharan M, Soloway MS, **Singal R.** Serum free circulating DNA is a useful biomarker to distinguish benign versus malignant prostate disease.

- Cancer Epidemiol Biomarkers Prev. 2010;19:1984-1991.
10. Ramachandran K, Gopisetty G, Gordian E, Navarro L, Hader C, Reis IM, Schulz WA, **Singal R**. Methylation-mediated repression of GADD45alpha in prostate cancer and its role as a potential therapeutic target. *Cancer Res.* 2009;69:1527-1535.
  11. Manoharan M, Katkoori D, Kishore TA, Kava B, **Singal R**, Soloway MS. Outcome after radical cystectomy in patients with clinical T2 bladder cancer in whom neoadjuvant chemotherapy has failed. *BJU Int.* 2009;104:1646-1649.
  12. Gordian E, Ramachandran K, **Singal R**. Methylation mediated silencing of TMS1 in breast cancer and its potential contribution to docetaxel cytotoxicity. *Anticancer Res.* 2009;29:3207-3210.
  13. Rocha-Lima CM, Soares HP, Raez LE, **Singal R**. EGFR targeting of solid tumors. *Cancer Control.* 2007;14:295-304.
  14. Ramachandran K, van Wert J, Gopisetty G, **Singal R**. Developmentally regulated demethylase activity targeting the betaA-globin gene in primary avian erythroid cells. *Biochemistry.* 2007;46:3416-3422.
  15. Ramachandran K, Soloway MS, **Singal R**, Manoharan M. The emerging role of epigenetics in urological cancers. *Can J Urol.* 2007;14:3535-3541.
  16. Ramachandran K, Navarro L, Gordian E, Das PM, **Singal R**. Methylation-mediated silencing of genes is not altered by selenium treatment of prostate cancer cells. *Anticancer Res.* 2007;27:921-925.
  17. Manoharan M, Ramachandran K, Soloway MS, **Singal R**. Epigenetic targets in the diagnosis and treatment of prostate cancer. *Int Braz J Urol.* 2007;33:11-18.
  18. Franzmann EJ, Reategui EP, Pedroso F, Pernas FG, Karakullukcu BM, Carraway KL, Hamilton K, **Singal R**, Goodwin WJ. Soluble CD44 is a potential marker for the early detection of head and neck cancer. *Cancer Epidemiol Biomarkers Prev.* 2007;16:1348-1355.
  19. Wiley A, Katsaros D, Chen H, Rigault de la Longrais IA, Beeghly A, Puopolo M, **Singal R**, Zhang Y, Amoako A, Zelterman D, Yu H. Aberrant promoter methylation of multiple genes in malignant ovarian tumors and in ovarian tumors with low malignant potential. *Cancer.* 2006;107:299-308.
  20. Reyes MA, Ciancio G, **Singal R**, Manoharan M. Adrenocortical carcinoma with tumor thrombus in the right hepatic vein. *Int J Urol.* 2006;13:1233-1235.
  21. Reategui EP, de Mayolo AA, Das PM, Astor FC, **Singal R**, Hamilton KL, Goodwin WJ, Carraway KL, Franzmann EJ. Characterization of CD44v3-containing isoforms in head and neck cancer. *Cancer Biol Ther.* 2006;5:1163-1168.
  22. Manoharan M, Reyes MA, **Singal R**, Kava BR, Nieder AM, Soloway MS. Orthotopic ileal neobladder reconstruction for bladder cancer: is adjuvant chemotherapy safe? *Int Braz J Urol.* 2006;32:529-535.
  23. Gopisetty G, Ramachandran K, **Singal R**. DNA methylation and apoptosis. *Mol Immunol.* 2006;43:1729-1740.
  24. Das PM, Ramachandran K, Vanwert J, Ferdinand L, Gopisetty G, Reis IM, **Singal R**. Methylation mediated silencing of TMS1/ASC gene in prostate cancer. *Mol Cancer.* 2006;5:28.
  25. **Singal R**, Das PM, Manoharan M, Reis IM, Schlesselman JJ. Polymorphisms in the DNA methyltransferase 3b gene and prostate cancer risk. *Oncol Rep.* 2005;14:569-573.

26. Santos ES, Raez LE, DeCesare T, **Singal R**. DNA methylation: its role in lung carcinogenesis and therapeutic implications. *Expert Rev Anticancer Ther.* 2005;5:667-679.
27. Manoharan M, Reyes MA, Kava BR, **Singal R**, Kim SS, Soloway MS. Is adjuvant chemotherapy for bladder cancer safer in patients with an ileal conduit than a neobladder? *BJU Int.* 2005;96:1286-1289.
28. Lu X, Nechushtan H, Ding F, Rosado MF, **Singal R**, Alizadeh AA, Lossos IS. Distinct IL-4-induced gene expression, proliferation, and intracellular signaling in germinal center B-cell-like and activated B-cell-like diffuse large-cell lymphomas. *Blood.* 2005;105:2924-2932.
29. **Singal R**, Ferdinand L, Reis IM, Schlesselman JJ. Methylation of multiple genes in prostate cancer and the relationship with clinicopathological features of disease. *Oncol Rep.* 2004;12:631-637.
30. **Singal R**, Ferdinand L, Das PM, Reis IM, Schlesselman JJ. Polymorphisms in the methylenetetrahydrofolate reductase gene and prostate cancer risk. *Int J Oncol.* 2004;25:1465-1471.
31. Montano MM, Deng H, Liu M, Sun X, **Singal R**. Transcriptional regulation by the estrogen receptor of antioxidative stress enzymes and its functional implications. *Oncogene.* 2004;23:2442-2453.
32. Katsaros D, Cho W, **Singal R**, Fracchioli S, Rigault De La Longrais IA, Arisio R, Massobrio M, Smith M, Zheng W, Glass J, Yu H. Methylation of tumor suppressor gene p16 and prognosis of epithelial ovarian cancer. *Gynecol Oncol.* 2004;94:685-692.
33. Das PM, **Singal R**. DNA methylation and cancer. *J Clin Oncol.* 2004;22:4632-4642.
34. Das PM, Ramachandran K, vanWert J, **Singal R**. Chromatin immunoprecipitation assay. *Biotechniques.* 2004;37:961-969.
35. Yaturu S, Harrara E, Nopajaroonsri C, **Singal R**, Gill S. Gynecomastia attributable to human chorionic gonadotropin-secreting giant cell carcinoma of lung. *Endocr Pract.* 2003;9:233-235.
36. **Singal R**, Wang SZ, Sargent T, Zhu SZ, Ginder GD. Methylation of promoter proximal-transcribed sequences of an embryonic globin gene inhibits transcription in primary erythroid cells and promotes formation of a cell type-specific methyl cytosine binding complex. *J Biol Chem.* 2002;277:1897-1905.
37. **Singal R**, vanWert JM, Ferdinand L, Jr. Methylation of alpha-type embryonic globin gene alpha pi represses transcription in primary erythroid cells. *Blood.* 2002;100:4217-4222.
38. Noss KR, **Singal R**, Grimes SR. Methylation state of the prostate specific membrane antigen (PSMA) CpG island in prostate cancer cell lines. *Anticancer Res.* 2002;22:1505-1511.
39. **Singal R**, vanWert JM. De novo methylation of an embryonic globin gene during normal development is strand specific and spreads from the proximal transcribed region. *Blood.* 2001;98:3441-3446.
40. **Singal R**, van Wert J, Bashambu M. Cytosine methylation represses glutathione S-transferase P1 (GSTP1) gene expression in human prostate cancer cells. *Cancer Res.* 2001;61:4820-4826.
41. **Singal R**, Grimes SR. Microsoft Word macro for analysis of cytosine methylation by the bisulfite deamination reaction. *Biotechniques.* 2001;30:116-120.
42. Grimes SR, Wolfe SA, **Singal R**. Macro for analysis of CpG and CpNpG methylation in plants. *Biotechniques.* 2001;30:1248.

43. **Singal R**, vanWert J, Bashambu M, Wolfe SA, Wilkerson DC, Grimes SR. Testis-specific histone H1t gene is hypermethylated in nongerminal cells in the mouse. *Biol Reprod.* 2000;63:1237-1244.
44. **Singal R**, Tu ZJ, Vanwert JM, Ginder GD, Kiang DT. Modulation of the connexin26 tumor suppressor gene expression through methylation in human mammary epithelial cell lines. *Anticancer Res.* 2000;20:59-64.
45. **Singal R**, Ginder GD. DNA methylation. *Blood.* 1999;93:4059-4070.
46. Osborne CS, Pasceri P, **Singal R**, Sukonnik T, Ginder GD, Ellis J. Amelioration of retroviral vector silencing in locus control region beta-globin-transgenic mice and transduced F9 embryonic cells. *J Virol.* 1999;73:5490-5496.
47. Ginder GD, **Singal R**, Little JA, Dempsey N, Ferris R, Wang SZ. Silencing and activation of embryonic globin gene expression. *Ann N Y Acad Sci.* 1998;850:70-79.
48. **Singal R**, Ferris R, Little JA, Wang SZ, Ginder GD. Methylation of the minimal promoter of an embryonic globin gene silences transcription in primary erythroid cells. *Proc Natl Acad Sci U S A.* 1997;94:13724-13729.
49. Kay CL, Davies-Jones GA, **Singal R**, Winfield DA. Paraneoplastic opsoclonus-myoclonus in Hodgkin's disease. *J Neurol Neurosurg Psychiatry.* 1993;56:831-832.
50. **Singal R**, Winfield DA, Greaves M. Bone marrow aplasia in B cell chronic lymphocytic leukaemia: successful treatment with antithymocyte globulin. *J Clin Pathol.* 1991;44:954-956.

## 18. Other works and publications:

### Invited Reviews

- Gopisetty, G., Ramachandran, K., and **Singal, R.** (2006). DNA methylation and apoptosis. *Mol Immunol* 43, 1729-1740.
- Das, P., Ramachandran, K., vanWert, J.M., **Singal, R.** (2004). Chromatin Immunoprecipitation Assay. *Biotechniques* 37(6):961-9.
- Das, P., **Singal, R.**, (2004) DNA Methylation and Cancer. *Journal of Clinical Oncology* 22: 4632-4642.
- **Singal, R.**, Ginder, G.D., (1999) DNA Methylation – review article. *Blood* 93, 4059-4070.

**Abstracts**

1. **Singal R**, Gordian E, Ramachandran K et al. Serum free circulating DNA as a biomarker for prostate cancer diagnosis. Presented at the 2010 annual meeting of the American Urological Association. May 29-June 3, 2010. San Francisco, CA. Abstract 1736.
2. **Singal R**, Gordian E, Ramachandran K, Katkooori D, Reis I, Manoharan M, Soloway MS. Serum-free circulating DNA as a biomarker of prostate cancer diagnosis. Annual Meeting of the American Urological Association, 2010. The Journal of Urology, Volume 183, Issue 4, Supplement 1, April 2010, Page e671
3. Antebie E, Katkooori D, **Singal R**, Soloway M, Manoharan M. Are completion rates better for neoadjuvant compared to adjuvant chemotherapy in patients undergoing radical cystectomy. The Journal of Urology, Volume 183, Issue 4, Supplement 1, April 2010, Page e660
4. Gordian E, Ramachandran K, Reis I, Manoharan M, Soloway MS, **Singal R**. Serum-free circulating DNA as a biomarker of prostate cancer diagnosis. Journal of Clinical Oncology, 2010 ASCO Annual Meeting Proceedings (Post-Meeting Edition). Vol 28, No 15\_suppl (May 20 Supplement), 2010: 4640
5. T. Talebi, M. Manoharan, M. S. Soloway and **R. Singal** High-dose ketoconazole in castration-resistant, metastatic prostate cancer patients previously treated with docetaxel chemotherapy: Single institution retrospective review. Journal of Clinical Oncology, 2010 ASCO Annual Meeting Proceedings (Post-Meeting Edition). Vol 28, No 15\_suppl (May 20 Supplement), 2010: e15151
6. **Singal R**, Ramachandran K, Gordian E, Reis I, Zhao, W. Phase I study of azacitidine, docetaxel, and prednisone in patients with metastatic castration-resistant prostate cancer (CRPC) previously treated with docetaxel-based therapy. American Society of Clinical Oncology, Genitourinary Cancers Symposium *Journal of Clinical Oncology*, 2010 ASCO Annual Meeting Proceedings (Post-Meeting Edition). Vol 28, No 15\_suppl (May 20 Supplement), 2010: e13563
7. **Singal R**, Gordian E, Ramachandran K, Reis I, Manoharan M, Soloway MS. Serum-free circulating DNA as a biomarker of prostate cancer diagnosis. American Society of Clinical Oncology, Genitourinary Cancers Symposium, 2010.
8. **Singal R**, Navarro L, Gordian E, Ramachandran K, Reis I, Manoharan M, Soloway M. Aberrant promoter methylation in serum of prostate cancer patients and controls. 2009 ASCO annual Meeting (abstract ID e16046).
9. **Singal R**, Ramachandran K, Reis I, Jorda M, Manoharan M. Methylation of GSTP1, RARB and RASSF1A in free circulating DNA and buffy coat DNA in prostate cancer patients and controls. The Journal of Urology April 2008 (Vol. 179, Issue 4, Page 461)
10. **Singal R**, Navarro L, Gordian E, Ramachandran K, Hamilton-Nelson K, Reis IM, Jorda M, Manoharan M. (2008) Methylation of GSTP1, RARB and RASSF1A in free circulating DNA and buffy coat DNA in prostate cancer patients and controls. 2008 Genitourinary Cancers Symposium (abstract # 262).
11. Ramachandran K, Gopisetty G, Navarro L, Gordian E, Manoharan M, **Singal R** (2007)



- Role of GADD45 $\alpha$  as a potential therapeutic target for prostate cancer. 2007 Prostate Cancer Symposium (abstract # 94).
12. Gopisetty G, Ramachandran K, **Singal R** (2006) Upregulation of GADD45 $\alpha$  expression either by treatment with 5' Aza-2' deoxycytidine or by downregulation of MeCP2 protein increases sensitivity of Du145 cells to Docetaxel chemotherapy *Proceedings of the American Association For Cancer Research (abstract # 583)*.
  13. Manoharan M, Reyes M, Kava B, **Singal R**, Soloway MS. Orthotopic neobladder reconstruction following cystectomy for bladder cancer: Is adjuvant chemotherapy safe? Annual Meeting of the American-Urological-Association, MAY 20-25, 2006 JOURNAL OF UROLOGY 175 (4): 1246, Suppl. S APR 2006
  14. Ramachandran K, van Wert J, Gopisetty G, **Singal R** (2005) Demethylation of beta(A)-globin gene in avian primary erythroid cells is developmentally regulated, strand asymmetrical and an active process. 47th Annual Meeting of the American-Society-of-Hematology, DEC 10-13, 2005 BLOOD 106 (11): 3647, Part 1 NOV 16 2005
  15. **Singal R**, Khurana V, Caldito G, Fort C. (2005) STATINS AND PROSTATE CANCER RISK: A LARGE CASE CONTROL STUDY IN VETERANS 2005 ASCO Annual Meeting (Abstract #1004) *Journal of Clinical Oncology*, 2005 ASCO Annual Meeting Proceedings. Vol 23, No. 16S, Part I of II (June 1 Supplement), 2005: 1004
  16. **Singal R**, Das PM, Reis IM, Schlesselman JJ (2005) Polymorphisms in the DNA methyltransferase 3b (DNMT3b) gene and prostate cancer risk. 2005 Prostate Cancer Symposium (abstract # 17).
  17. Wiley, A., Katsaros, D., Fracchioli, S., Chen, H., Zhang, Y., Amoako, A., Beeghly, A., **Singal, R.**, Yu, H. (2005) Different methylator phenotypes between benign and malignant ovarian tumors. *Proceedings of the American Association For Cancer Research (abstract # 860)*.
  18. **Singal, R.**, vanWert, J.M., Das, P., Ramachandran, K. Epigenetic silencing of RASSF1A gene expression in cancer. *Proceedings of the American Association For Cancer Research (abstract # 1827)*.
  19. **Singal, R.**, Reis, I.M., Schlesselman, J.J. (2004) Methylation of selected genes occurs at a significantly higher frequency in prostate cancers than in benign prostatic hypertrophy specimens and correlates with clinicopathological features of poor prognosis in prostate cancer patients. *Proceedings of the American Association For Cancer Research (abstract #900)*.
  20. **Singal, R.**, Ferdinand, L., vanWert, J.M, Shi, R., Sood, P., Nopajaroonsri, C. (2003) Polymorphisms in the methylenetetrahydrofolate reductase gene and prostate cancer risk. *American Society of Clinical Oncology Annual Meeting (abstract # 1596)*.
  21. **Singal, R.**, Ferdinand, L., vanWert, J.M. (2003) Methylation is dominant over histone deacetylation in silencing Glutathione S-Transferase P1 (GSTP1) gene expression in prostate cancer cells. *Proceedings of the American Association For Cancer Research (abstract #4106)*.
  22. Ferdinand, L., vanWert, J.M., Shi, R., Turturro, F., Nopajaroonsri, C., **Singal, R.** (2003) Promoter methylation of Glutathione S-Transferase P1 (GSTP1), Endothelin-B Receptor (EBR), and RASSF1A genes in prostate cancer. *Proceedings of the American Association For Cancer Research (abstract #5415)*.
  23. **Singal, R.**, Ferdinand, L., vanWert, J.M, Shi, R., Sood, P., Nopajaroonsri, C. (2003) Polymorphisms in the methylenetetrahydrofolate reductase gene and prostate cancer risk. *American Society of Clinical Oncology Annual Meeting (abstract # 1596)*.
  24. **Singal, R.**, Ferdinand, L., vanWert, J.M. (2003) Methylation is dominant over histone deacetylation in silencing Glutathione S-Transferase P1 (GSTP1) gene expression in

- prostate cancer cells. *Proceedings of the American Association For Cancer Research* (abstract #4106).
25. Ferdinand, L., vanWert, J.M., Shi, R., Turturro, F., Nopajaroonsri, C., **Singal, R.** (2003) Promoter methylation of Glutathione S-Transferase P1 (GSTP1), Endothelin-B Receptor (EBR), and RASSF1A genes in prostate cancer. *Proceedings of the American Association For Cancer Research* (abstract #5415).
  26. **Singal, R.**, vanWert, J.M. (2002) Demethylation of  $\beta_A$ -globin gene promoter accompanies transcriptional activation in primary erythroid cells. *Blood* **100** (10, Suppl.2; abstract #3586)
  27. **Singal, R.**, vanWert, J.M. (2001) Methylation of an  $\alpha$ -type embryonic globin gene ( $\alpha^T$ ) suppresses transcription in primary erythroid cells. *Blood* **98**(10, Suppl.1; abstract #2077).
  28. **Singal, R.**, vanWert, J., Mills, G., Bashambu, M. (2001) Cytosine methylation represses glutathione s-transferase pi (GSTP1) gene expression in human prostate cancer cells. *Proceedings of the American Association For Cancer Research* (abstract #3793).
  29. Gameau, L.J., Carroll, J.L., Birrer, M.J., **Singal, R.**, Mathis, J. M., Dayton, M.A. (2001) Regulation of MKP-1 Gene Expression in Ovarian and Breast Cancer Cell Lines by DNA Methylation. *Proceedings of the American Association For Cancer Research* (abstract #2103).
  30. Yu, H., **Singal, R.**, Smith, M., Glass, J., Li, B. (2001) Methylation of p16 in Peripheral Blood Cells and Breast Cancer. *Proceedings of the American Association For Cancer Research* (abstract #808).
  31. Gameau, L.J., Carroll, J.L., **Singal, R.**, Mathis, J. M., Dayton, M.A. (2001) Effects of DNA Methylation on FRPAP Gene Expression in Ovarian and Breast Cancer Cell Lines. *Proceedings of the American Association For Cancer Research* (abstract #2147).
  32. Ginder, G.D., **Singal, R.**, Wang, S.Z., vanWert, J.M.(2000) DNA methylation mediated gene silencing mechanism in primary erythroid cells. *Blood Cells, Molecules, & Diseases* **26** (5) 496 (abstract #20).
  33. Ginder, G.D., **Singal, R.**, Wang, S.Z. (2000) Developmental stage-specific coding sequence methylation of the embryonic rho globin gene inhibits transcription in primary erythroid cells. *Blood Cells, Molecules, & Diseases* **26** (5) 516 (abstract #89).
  34. **Singal, R.**, vanWert, J.M., Wang, S.Z., Ginder, G.D. (2000) De novo methylation of an embryonic globin gene during normal development is strand-specific and spreads from 3' coding sequences. *Blood Cells, Molecules, & Diseases* **26** (5) 528, (abstract #132).
  35. Subramanian, V., Yaturu, S., **Singal, R.** (2000) Small cell carcinoma of the lung with metastasis to the pituitary gland. *The Endocrine Society's 82<sup>nd</sup> Annual Meeting*. 543 (abstract #2248).
  36. **Singal, R.**, vanWert, J. M., Eastham, J., Smith, M., Bashambu, M., Glass, J., Yu, H. (2000) Aberrant promoter methylation of the Glutathione S-transferase  $\beta$ (GSTP1) gene in peripheral blood DNA is associated with prostate cancer risk. *Proceedings of the American Association For Cancer Research* **41**: 496 (abstract #3167).
  37. **Singal, R.**, vanWert, J.M., Wang, S.Z., Ginder, G.D. (1999) Strand-specific methylation analysis of avian  $\alpha$ -type globin genes during stage-specific expression in primary erythroid cells. *Blood* **94**(10, Suppl.1):582A
  38. **Singal, R.**, Wang, S.Z., Ginder, G.D. (1998) Methylation of the 5' transcribed region of an embryonic globin gene suppresses transcription in primary erythroid cells. *Blood* **92**(10, Suppl.1):333A
  39. **Singal, R.**, Ferris, R.C., Ginder, G.D. (1996) Methylation of the minimal promoter of an embryonic globin gene suppresses transcription and enhancement in primary erythroid cells. *Blood* **88**(10, Suppl.1):650A

**19. Other works accepted for publication:****PROFESSIONAL****20. Funded Research Performed (include all grants received in the last five years, identifying the principal investigator):**

<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>		<b>Dates of Grant:</b>	12/1/2013-11/30/2015
<b>Source:</b>	Bankhead-Coley	<b>Total Annual Costs:</b>	\$400,000
<b>Grant Status:</b>	Active	<b>Total Annual Direct Costs:</b>	\$347,826
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	10%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	10%
<b>Title of Project:</b>	Methylation Profiling in Free Circulating DNA as a Biomarker for Risk Stratification of Prostate Cancer		
<b>Major Project Goals:</b>	To identify methylation markers of aggressive prostate cancer		
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	10BT03	<b>Dates of Grant:</b>	7/1/10-12/31/13
<b>Source:</b>		<b>Total Annual Costs:</b>	\$357,750
<b>Grant Status:</b>	Active	<b>Total Annual Direct Costs:</b>	\$315,000
<b>Your Role on this Project:</b>	Project 4 PI	<b>Percent Effort:</b>	5%
<b>This Project PI:</b>	Pollack, Alan	<b>Percent Salary:</b>	5%
<b>Title of Project:</b>	Integrated Biomarker Profiling for Individualized Prostate Cancer Therapy Biomarkers of Response to Epigenetic Therapy in Metastatic Castrate-Resistant Prostate Cancer (Project 4)		
<b>Major Project Goals:</b>	To correlate methylation in free circulating DNA with that of gene expression in circulating tumor cells to identify biomarkers of docetaxel resistance in prostate cancer patients.		
<b>Overlap Status:</b>	None		
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	183750CS3	<b>Dates of Grant:</b>	5/17/11-5/16/15
<b>Source:</b>	ISIS	<b>Total Annual Costs:</b>	\$114,173
<b>Grant Status:</b>	Active	<b>Total Annual Direct Costs:</b>	\$88,506
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	1%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	1%
<b>Title of Project:</b>	A Phase 1 b/2 Study of Docetaxel and Prednisone, with or without ISIS 183750 (an eIF4E Inhibitor), in Patients with Castrate-Resistant Prostate Cancer		
<b>Major Project Goals:</b>	Clinical Trial		
<b>Overlap Status:</b>	None		

<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	66879P-223665	<b>Dates of Grant:</b>	8/3/11-9/6/13
<b>Source:</b>	Millennium	<b>Total Annual Costs:</b>	\$198,131
<b>Grant Status:</b>	Active	<b>Total Annual Direct Costs:</b>	\$153,590
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	1%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	1%
<b>Title of Project:</b>	A Phase 3, Randomized, Double-Blind, Multicenter Trial Comparing Orteronel (TAK-700) Plus Prednisone with Placebo Plus Prednisone in Patients with Chemotherapy-Naive Metastatic Castration-Resistant Prostate Cancer		
<b>Major Project Goals:</b>	Clinical Trial		
<b>Overlap Status:</b>	None		
<b>Name of Key Personnel:</b>			
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	66879R	<b>Dates of Grant:</b>	8/3/11-10/1/13
<b>Source:</b>	Millennium	<b>Total Annual Costs:</b>	\$220,597
<b>Grant Status:</b>	Completed	<b>Total Annual Direct Costs:</b>	\$171,005
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	1%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	1%
<b>Title of Project:</b>	Orteronel (TAK-700) A Phase 3, Randomized, Double-Blind, Multicenter Trial Comparing Orteronel (TAK-700) Plus Prednisone with Placebo plus Prednisone in Patients With Metastatic Castration-Resistant Prostate Cancer That Has Progressed During or Following Docetaxel-based Therapy		
<b>Major Project Goals:</b>	Clinical Trial		
<b>Name of Key Personnel:</b>			
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	PROPOSALM1100555	<b>Dates of Grant:</b>	10/14/11-10/13/13
<b>Source:</b>	Sanofi Aventis	<b>Total Annual Costs:</b>	\$75,000
<b>Grant Status:</b>	Completed	<b>Total Annual Direct Costs:</b>	\$75,000
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	1%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	1%
<b>Title of Project:</b>	Mechanism of Cabazitaxel Resistance in Prostate Cancer		
<b>Major Project Goals:</b>	Clinical Trial		
<b>Name of Key Personnel:</b>			
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>	N101	<b>Dates of Grant:</b>	4/9/12-4/8/16
<b>Source:</b>	Dendreon	<b>Total Annual Costs:</b>	\$39,847
<b>Grant Status:</b>	Active	<b>Total Annual Direct Costs:</b>	\$30,889
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	1%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	1%
<b>Title of Project:</b>	A Randomized, Phase 2, Open-Label Study Evaluating DN24-02 as Adjuvant Therapy in Subjects with High Risk HER2+ Urothelial Carcinoma		

<b>Major Project Goals:</b>	Clinical Trial		
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>		<b>Dates of Grant:</b>	6/11/11-5/31/12
<b>Source:</b>	WCA	<b>Total Annual Costs:</b>	\$50,000
<b>Grant Status:</b>	Completed	<b>Total Annual Direct Costs:</b>	\$50,000
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	2%
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	2%
<b>Title of Project:</b>	A Simple Test for Prostate Cancer Diagnosis		
<b>Major Project Goals:</b>	To identify methylation markers of aggressive prostate cancer		
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>		<b>Dates of Grant:</b>	9/1/08 - 8/31/11
<b>Source:</b>	Celgene	<b>Total Annual Costs:</b>	\$50,000
<b>Grant Status:</b>	Completed	<b>Total Annual Direct Costs:</b>	\$50,000
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	
<b>Title of Project:</b>	Effect of 5-Azacytidine on PSA Expression and Secretion in Prostate Cancer		
<b>Major Project Goals:</b>	To study whether 5-Azacytidine alone or in combination with Docetaxel alters transcription of PSA, secretion of PSA or both.		
<b>Name of Key Personnel:</b>	Singal, Rakesh	<b>Role in the Project:</b>	PI
<b>Grant Number:</b>		<b>Dates of Grant:</b>	7/24/07-7/23/11
<b>Source:</b>	Celgene	<b>Total Annual Costs:</b>	\$50,000
<b>Grant Status:</b>	Completed	<b>Total Annual Direct Costs:</b>	\$50,000
<b>Your Role on this Project:</b>	PI	<b>Percent Effort:</b>	
<b>This Project PI:</b>	Singal, Rakesh	<b>Percent Salary:</b>	
<b>Title of Project:</b>	Reversal of effects of methylation in bladder cancer		
<b>Major Project Goals:</b>	To examine whether treatment with 5-Azacytidine can reverse resistance to chemotherapy in bladder cancer cells.		

### **Previously Completed Research Support**

PROPOSALM0701171 (Singal, Rakesh) 1/3/07 - 1/3/10 1%  
Pharmion \$ 73,424  
A Phase I/II Study of 5-Azacytidine with Docetaxel in Hormone Refractory Metastatic Prostate Cancer  
Role: PI

SCCC 2008061 (Singal)

ECOG

Chemohormonal Therapy Versus Androgen Ablation Randomized Trial for Extensive Disease in Prostate Cancer

Date Open to Accrual 2/2/09

Role: PI

SCCC 2003147 (Singal)

SCCC

Molecular Markers in the Blood and Tissues of Prostate Cancer Patients

Role: PI

Date Open to Accrual 1/14/04

9/1/08 - 8/31/11

\$50,000

SCCC 2008060 (Singal)

ECOG

Phase III Study of Docetaxel and Atrasentan Versus Docetaxel and Placebo for Patients with Advanced Hormone Refractory Prostate Cancer

Date Open to Accrual 1/16/09

Role: PI

011007 (Singal, Rakesh)

3/8/06 - 3/8/10

1%

Novacea

\$ 18,275

Phase 3 Randomized Open Label Study Evaluation DN 101 in Combination with Docetaxel in Androgen Independent Prostate Cancer (Ascent-2)

Role: PI

EFC6193 (Singal, Rakesh)

9/8/07 - 8/16/11

1%

Sanofi

\$ 26,348

A Randomized, Open Label Multi-Center Study of XRP6258 at 25 mg/m in Combination with Prednisone Every 3 Weeks Compared to Mitoxantrone in Combination with Prednisone for the Treatment of Hormone Refractory Metastatic Prostate Cancer Previously Treated with a Taxotere - Containing Regimen

Role: PI

PROPOSALM0801263 (Ramachandran, Kavitha)

6/1/08 - 5/31/09

0%

WCA

\$ 50,000

Reversal of Effects of DNA Methylation in Pancreatic Cancer

To disseminate such information concerning cancer as has been scientifically approved by physicians and qualified cancer research specialists.

Role: Mentor

DC782C00010 (Singal, Rakesh)	12/2/08 - 12/2/12	0%
AstraZeneca	\$ 134,266	

A Phase II, Single Arm, Single Agent, Multicenter, Adaptive 2-Stage Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of AZD4877 Administered Weekly in Patients with Recurrent Advanced Urothelial Cancer

Role: PI

IST16189 (Singal, Rakesh)	4/25/07 - 11/30/10	1%
Sanofi	\$ 29,497	

A Phase I/II Study of 5-Azacytidine with Docetaxel in Hormone Refractory Metastatic Prostate Cancer

Role: PI

<b>Singal (PI)</b>	6/1/05 – 5/31/08
WCA	\$ 50,000

Methylation mediated repression of TMS1 gene in cancer

Role:PI

<b>Singal (PI)</b>	10%	5/1/04 – 4/30/08
Department of Defense		\$532,275

Aberrant promoter methylation in serum DNA as a biomarker for prostate cancer

Role: PI

<b>Singal (PI)</b>	30%	4/1/05 – 31/3/08
VA Merit Review		\$446,000

RASSF1A Gene Repression in Prostate Cancer

Role: PI

<b>Singal (PI)</b>	20%	9/30/03 - 9/29/06
NIH <i>1R21 CA089348</i>		\$150,000

GSTP1 Gene Repression in Prostate Cancer

Role:PI

<b>Singal (PI)</b>	5%	5/1/02 – 4/30/06
Department of Defense		\$220,617

Methylation-Mediated Repression of Selected Genes in Prostate Cancer

Role: PI

<b>Singal (PI)</b>	365 hrs.	1/1/04 – 12/31/05
Aventis		

A Phase II Study of Neoadjuvant Docetaxel and Estramustine in High Risk Prostate Cancer Patients (GIA 16139).

<b>Singal (PI)</b>	47 hrs.	11/1/03 – 12/31/05
Novacea		

A Phase 2/3 Multicenter, Randomized, Double Blind, Study of Docetaxel Plus DN-101 or Placebo in

## Androgen Independent Prostate Cancer (AIPC)

**Singal (PI)** 75% 4/1/02 - 3/31/05  
 VA  
 Advanced Research Career Development Award \$150,000 + 100% VA salary support  
 Role of Cytosine Methylation in Developmental Globin Gene Regulation

**Singal (PI)** 40% 10/1/99-3/31/02  
 VA Merit Review \$140,000  
 DNA methylation, acetylation and globin gene regulation'

**Grimes (PI)** 5%  
**Singal (co-investigator)**  
 Department of Veteran Affairs 10/01/00-9/30/03  
 VA Merit Review \$378,100  
 Mechanisms regulating expression of the testis histone H1t gene  
 Role: Co-Investigator

Grimes (PI)  
**Singal (co-investigator)** 5% 4/1/05 – 31/3/07  
 VA Merit Review  
 Mechanisms Regulating Expression of the Testis Histone H1t Gene  
 Role: co-investigator

**21. Editorial responsibilities:****Ad-hoc reviewer**

1. Cancer Research
2. Journal of Cellular Biochemistry
3. Hematological Oncology
4. BioTechniques
5. Lancet
6. Molecular and Cellular Biology
7. BMC Medicine
8. Journal of Clinical Endocrinology and Metabolism

**22. Professional and Honorary Organizations (member; officer; date):**

1. American Society of Hematology
2. American Society of Clinical Oncology
3. American Association of Cancer Research

**23. Honors and Awards:**

- **Watson Award (1998).** Awarded by the Minneapolis Society of Internal Medicine and Minnesota Medical Foundation for outstanding research achievement by a physician in graduate clinical training.



- **Poster Discussant Award (1997).** Awarded by DNA Methylation Society at the FASEB's conference on "Biological Methylation"
- **Advanced Research Career Development Award (2002).** Awarded by the Department of Veterans Affairs.
- **South Florida Super Doctors 2009**

**24. Post-Doctoral Fellowships:**

University of Minnesota (1994 – 1998)  
(as part of the Hematology - Oncology Fellowship)

**25. Other Professional Activities (e.g., papers presented; performance; conference proceedings; seminar or conference panel member; etc.):**

**Review Panel:** 1. Department of Defense Prostate Cancer Research Awards (2006 to date)  
2. Ad-hoc reviewer for Department of Veterans Affairs Merit Review Program

**Panelist - Prostate Cancer:** 16th Annual International Challenging Cases in Urology (2006), Miami, Florida

**Poster presentations (Oral presentations indicated by \*)**

- **\*American Urological Association, 2010. Singal R,** Gordian E, Ramachandran K, Katkooori D, Reis I, Manoharan M, Soloway MS. Serum-free circulating DNA as a biomarker of prostate cancer diagnosis.
- **American Urological Association, 2010.** Antebie E, Katkooori D, **Singal R,** Soloway M, Manoharan M. Are completion rates better for neoadjuvant compared to adjuvant chemotherapy in patients undergoing radical cystectomy.
- **American Society of Clinical Oncology, 2010.** Gordian E, Ramachandran K, Reis I, Manoharan M, Soloway MS, **Singal R.** Serum-free circulating DNA as a biomarker of prostate cancer diagnosis.
- **American Society of Clinical Oncology Genitourinary Cancers Symposium, 2010. Singal R,** Gordian E, Ramachandran K, Reis I, Manoharan M, Soloway MS. Serum-free circulating DNA as a biomarker of prostate cancer diagnosis.
- **American Society of Clinical Oncology Genitourinary Cancers Symposium, 2010.** T. N. Talebi, M. Manoharan, M. S. Soloway, **R. Singal.** Efficacy of high-dose ketoconazole in castration-resistant, metastatic prostate cancer patients previously treated with docetaxel chemotherapy: Single institution retrospective review.
- **American Urological Association, 2008 Singal R,** Ramachandran K, Reis I, Jorda M, Manoharan M. Methylation of GSTP1, RARB and RASSF1A in free circulating DNA and buffy coat DNA in prostate cancer patients and controls.
- **Genitourinary Cancers Symposium, 2008 Singal R,** Navarro L, Gordian E, Ramachandran K, Hamilton-Nelson K, Reis IM, Jorda M, Manoharan M. Methylation of GSTP1, RARB and RASSF1A in free circulating DNA and buffy coat DNA in prostate cancer patients and controls. 2008.

- **Prostate Cancer Symposium, 2007** Ramachandran K, Gopisetty G, Navarro L, Gordian E, Manoharan M, **Singal R** (2007) Role of GADD45 $\alpha$  as a potential therapeutic target for prostate cancer.
- **American Association For Cancer Research, 2006** Gopisetty G, Ramachandran K, **Singal R** Upregulation of GADD45 $\alpha$  expression either by treatment with 5' Aza-2' deoxycytidine or by downregulation of MeCP2 protein increases sensitivity of Du145 cells to Docetaxel chemotherapy.
- **Annual Meeting of the American-Society-of-Hematology, DEC 10-13, 2005** Demethylation of beta(A)-globin gene in avian primary erythroid cells is developmentally regulated, strand asymmetrical and an active process. Ramachandran K, van Wert J, Gopisetty G, **Singal R**. BLOOD 106 (11): 3647, Part 1 NOV 16 2005
- **\*ASCO Annual Meeting, 2005 Singal R**, Khurana V, Caldito G, Fort C. STATINS AND PROSTATE CANCER RISK: A LARGE CASE CONTROL STUDY IN VETERANS
- **American Association of Cancer Research, 2004**, Methylation of selected genes occurs at a significantly higher frequency in prostate cancers than in benign prostatic hypertrophy specimens and correlates with clinicopathological features of poor prognosis in prostate cancer patients. **Singal, R.**, Reis, I.M., Schlesselman, J.J.
- **American Association of Cancer Research, 2003**, Methylation is dominant over histone deacetylation in silencing Glutathione S-Transferase P1 (GSTP1) gene expression in prostate cancer cells. **Singal, R.**, Ferdinand, L., vanWert, J.M.
- **American Society of Hematology 2001**, Methylation of an  $\alpha$ -type embryonic globin gene ( $\alpha^{\pi}$ ) suppresses transcription in primary erythroid cells. **Singal, R.**, vanWert, J.M
- **\*Orcas Island Hemoglobin Switching Meeting 2000** DNA methylation mediated gene silencing mechanism in primary erythroid cells. Ginder, G.D., **Singal, R.**, Wang, S.Z., vanWert, J.M.
- **Orcas Island Hemoglobin Switching Meeting 2000** Developmental stage-specific coding sequence methylation of the embryonic rho globin gene inhibits transcription in primary erythroid cells. Ginder, G.D., **Singal, R.**, Wang, S.Z.
- **Orcas Island Hemoglobin Switching Meeting 2000** De novo methylation of an embryonic globin gene during normal development is strand-specific and spreads from 3' coding sequences. **Singal, R.**, vanWert, J.M., Wang, S.Z., Ginder, G.D.
- **American Association of Cancer Research, 2000** Aberrant promoter methylation of the Glutathione S-transferase  $\delta$  (*GSTP1*) gene in peripheral blood DNA is associated with prostate cancer risk. **Singal, R.**, vanWert, J. M., Eastham, J., Smith, M., Bashambu, M., Glass, J., Yu, H., (2000)
- **\*American Society of Hematology, 1999** Strand-specific methylation analysis of avian  $\alpha$ -type globin genes during stage-specific expression in primary erythroid cells. **Singal, R.**, vanWert, J.M., Wang, S.Z., Ginder, G.D.
- **Genomic Imprinting and Environmental Disease Susceptibility, 1998** Modulation of the tumor suppressor gene connexin26 expression through methylation in immortalized and malignant human mammary epithelial cells. **Singal, R.**, Tu, Z. J., Ginder, G., and Kiang, D. T.
- **American Society of Hematology, 1998** Methylation of the 5' transcribed region of an embryonic globin gene suppresses transcription in primary erythroid cells. **Singal, R.**, Wang, S.Z., Ginder, G.D.
- **Orcas Island Hemoglobin Switching Meeting 1998** Silencing of Human  $\alpha$ -globin Locus Control Region Reporter Genes by Retrovirus Sequences in Transient Transgenic Mice Osborne, C., Pasceri, P., **Singal, R.**, Sukonnik, T., Ginder G.D., Ellis J.
- **FASEB's conference on 'Biological Methylation' 1997** Promoter methylation of an embryonic globin gene suppresses transcription and enhancement in primary erythroid cells **Singal, R.**, Ferris, R.C., Ginder, G.D.

- **\*Seventh Cooley's Anemia Symposium, 1997** Activation of fetal and embryonic globin gene expression. Ginder, G.D., **Singal, R.**, Little, J.A., Wang, S.Z.
- **\*American Society of Hematology, 1996** Methylation of the minimal promoter of an embryonic globin gene suppresses transcription and enhancement in primary erythroid cells. **Singal, R.**, Ferris, R.C., Ginder, G.D.

### Invited Speaker

1. Banaras Hindu University, Varanasi, India (January 2009). *Management of metastatic prostate cancer.*
2. Department of Medicine, University of Miami (April 2009) *Management of metastatic prostate cancer.*
3. ASCO update 2008: 'Prostate Cancer' Scripps Clinic's 5<sup>th</sup> Annual Post ASCO Oncology Update
4. Hematology-Oncology Grand Rounds, Department of Medicine, University of Miami (October 2008). *GADD45A – a potential therapeutic target for prostate cancer*
5. Department of Medicine, University of Miami (September 2008) *GADD45A – a potential therapeutic target for prostate cancer.*
6. 7<sup>th</sup> INDO-US CYTOMETRY WORKSHOP Cellular Proliferation, Apoptosis and Signal Transduction, February 10-14, 2007, Centre for Biotechnology, Jawaharlal Nehru University, New Delhi, India
7. Department of Medicine, University of Miami (2006) *Update on prostate cancer management.*
8. Department of Medicine, University of Miami (2006) *GADD45A – a potential therapeutic target for prostate cancer.*
9. National Institute of Immunology, Delhi, India (2005).
10. All India Institute of Medical Sciences, Delhi, India (2005).
11. Indian Association for Cancer Research – 23<sup>rd</sup> Annual Convention, Mumbai, India (2004).
12. American Association for Cancer research – Landon Awards, University of Miami, Miami (2004)
13. Centre for Cellular and Molecular Biology, Hyderabad, India (2004).
14. Department of Molecular and Cellular Pharmacology, University of Miami. *DNA methylation and globin gene regulation* (2003).
15. Department of Medicine, University of Miami. *GSTP1 gene repression in prostate cancer* (2003).
16. Department of Biochemistry Seminar Series at LSU Health Sciences Center, Shreveport, LA – 'Methylation mediated repression of an avian embryonic globin gene' (2000)
17. Presentation entitled 'DNA methylation and gene expression' at the FASEB's conference on Biological Methylation (1999).

### Community Lectures

1. *Conversations About Cancer - Recent Advances in Prostate Cancer Treatment:* Presentation given at UM/Sylvester at Deerfield Beach, 2007.

2. *Conversations About Cancer Series: Basics of Chemotherapy*. Presentation given at UM/Sylvester at Deerfield Beach on October 17, 2006.
3. *Conversations About Cancer - Recent Advances in Prostate Cancer Treatment* Presentation given at UM/Sylvester Comprehensive Cancer Center on September 19, 2006.

### **Teaching:**

#### *University of Miami*

Department of Medicine didactic lecture series

Prostate Cancer

Cancer Biology Course (2007 - 2011) Cancer Epigenetics

Prostate Cancer

Hematology/Oncology Fellows Lecture Series (2005 - 2013)

Cancer Epigenetics

Prostate Cancer

Tumor Biology Course (2002 - 2010) Cancer Epigenetics

#### *Prior teaching experience*

Heme, Lymph, and Neoplasia Course (1999 – 2003) – to medical students, LSU Medical Centre, Shreveport, LA

Physical Diagnosis Course (1999 – 2003) – to medical students, LSU Medical Centre, Shreveport, LA

Hematology/Oncology fellows, LSU Medical Center, Shreveport, LA 1998 - 2003

Following students trained in my lab prior to joining medical school –

Larry Ferdinand (2001 – 2003) –Howard University Medical School, Washington, D. C.

Monuj Bashambu (1999 – 2000) –Tulane Medical School, New Orleans

Heather Miller (2008-2010) Florida International University Medical School

#### *Post doctoral research associates trained*

Gopal Gopisetty (2004 - 2006)

Kavitha Ramachandran, Ph.D. (2004 - )

Partha M. Das, MD (2003 - 2005)

Jane vanWert, Ph.D. (1999 - 2005)

### **27. Thesis and Dissertation Advising/Post-doctoral student supervision (chairman or committee member; topic; student name; date):**

Committee member –

Adriana Rebelo 2006

Adena Rosenblatt 2006

**SERVICE****28. University Committee and Administrative Responsibilities:**

Co-chair Genitourinary Site Disease Program Sylvester Cancer Center, University of Miami	2010 to date
Member, Genitourinary Malignancies Program Sylvester Cancer Center, University of Miami	2010 to date
Jackson Memorial Hospital, P & T committee	2009 to 2010
Scientific Awards Committee University of Miami School of Medicine University of Miami	2004 to 2007
Scientific Steering Committee Sylvester Cancer Center, University of Miami	2004 to 2006
Tumor Cell Biology Program Sylvester Cancer Center, University of Miami	2003 to 2010
Clinical Oncology Research Program Sylvester Cancer Center, University of Miami	2003 to 2010
Institutional Review Board Member Overton Books VA Medical Center	1999 – 2001