

BIOGRAPHICAL SKETCH

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NAME Potti, Anil, M.B., B.S.		POSITION TITLE Assistant Professor, Dept. of Medicine Assistant Professor, Duke Institute for Genome Sciences and Policy	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Christian Medical College, Vellore, India	M.B.; B.S.	1989-1995	Medicine
Univ. of North Dakota, School of Medicine	Residency	1996-2000	Internal Medicine
Univ. of North Dakota, School of Medicine	Chief Res.	2000-2001	Internal Medicine
Duke University Medical Center, Durham, NC	Fellowship	2003-2006	Hematology/Oncology

A. Positions and Honors:

1995 – 1996 Research Fellowship at Queensland Research Institute, Australia (Mentor: Gordon McLaren).
2003 – 2006 Research Fellow, Duke University (Mentor: Joseph Nevins)
1995 National Merit Scholar
1997 Resident Teacher of the Year – UND School of Medicine.
1998 American Society of Clinical Oncology (ASCO) Merit Award.
1998 Young Investigator Award - AFMR/CSCR.
1999 Alpha-Omega-Alpha (AOA) Honor Society Membership.
2000 UND Academic & Teaching Excellence Award.
2001 Cure for Lymphoma & Lymphoma Research Foundation Award.
2001 Young Investigator Award - Central Society of Clinical Research (CSCR)
2002 Golden Apple Award (teaching award from medical students).
2003 Leonard P. Tow Humanism in Medicine Award.
2003 Golden Apple Award (teaching award from medical students).
2003 Frank N. Low Prize in Clinical Research.
2004 Claus Strohlein Research Award.
2005 ASCO/Aventis Fellows Merit Award.
2005 Duke Scholar in Genomic Medicine.
2006 Robert Silber Research Prize.
2006 Robert and Barbara Bell Post Doctoral Research Excellence Award.
2006 AACR-Cancer Prevention Foundation Award for Excellence in Translational Research.
2006 ACS Career Development Award.
2006 V Foundation Grant for Lung Cancer Research.
2007 Burroughs Wellcome Fund Cancer Research Award
2007 Lisa Stafford Memorial Prize

B. Selected Peer-Reviewed Publications (selected from over 100 publications)

Acharya CR, Hsu DS, Anders CK, Anguiano A, Salter KH, Walters KS, Redman RC, Tuchman SA, Moylan CA, Mukherjee S, Barry WT, Dressman HK, Ginsburg GS, Marcom KP, Garman KS, Lyman GH, Nevins JR, **Potti A**. Gene expression signatures, clinicopathological features, and individualized therapy in breast cancer. JAMA 299:1605-6.

Potti A, Nevins JR. Reply to 'Microarrays – retracing steps. Nature Medicine 13:1277-1278, 2007.

Garman KS, Nevins JR, **Potti A**. Genomic strategies for personalized cancer therapy. Hum Mol Genet. 2007 Oct 15;16:R226-32.

Hsu DS, Balakumaran BS, Acharya CR, Vlahovic V, Walters KS, Garman K, Anders C, Riedel RF, Lancaster J, Harpole D, Dressman HK, Nevins JR, Febbo PG, **Potti A**. Pharmacogenomic strategies provide a rational

approach to the treatment of cisplatin-resistant patients with advanced cancer. *J Clin Oncol*. 2007 Oct 1;25(28):4350-7.

Nevins JR, **Potti A**. Mining gene expression profiles: expression signatures as cancer phenotypes. *Nat Rev Genet*. 2007 Aug;8(8):601-9.

Dressman HK, Berchuck A, Chan G, Zhai J, Bild A, Sayer R, Cragun J, Clarke J, Whitaker RS, Li L, Gray J, Marks J, Ginsburg GS, **Potti A**, Nevins JR, Lancaster JM. An integrated genomic-based approach to individualized treatment of patients with advanced-stage ovarian cancer. *J Clin Oncol*. 2007 Feb 10;25(5):517-25.

Dressman HK, Bild A, Garst J, Harpole D, **Potti A**. Genomic Signatures in Non-small-cell Lung Cancer: Targeting the Targeted Therapies. *Curr Oncol Rep*. 2006 Jul;8(4):252-7.

Potti A, Dressman HK, Bild A, Riedel R, Berchuk A, Kelley M, Ginsberg G, Febbo PG, Lancaster J, Nevins JR. Genomic signatures to guide the use of chemotherapeutics. *Nature Medicine*, 2006 (epub).

Potti A, Mukherjee S, Petersen R, Dressman HK, Bild A, Kratzke R, Watson M, Kelley MJ, Ginsburg G, West M, Harpole D, Nevins JR. A Genomic Strategy to Refine Prognosis and Therapeutic Decision for Adjuvant Therapy in Non-Small Cell Lung Carcinoma. *New Engl J Med*, 2006, 355, 570-580.

Balko JM, **Potti A**, Saunders C, Stromberg A, Haura EB, Black EP. Gene expression patterns that predict sensitivity to epidermal growth factor receptor tyrosine kinase inhibitors in lung cancer cell lines and human lung tumors. *BMC Genomics*. 2006 Nov 10;7(1):289

Bild A, **Potti A**, Nevins JR. Linking Oncogenic Pathways to Targeted Therapies. *Nature Reviews Cancer*, (epub) July 2006.

Lancaster JM, Dressman HK, Chan G, Zhai J, Bild A, Cragun J, Sayer R, Clarke J, Whitaker RS, Gray RS, Marks J, Ginsburg GS, **Potti A**, West M, Berchuck A, Nevins JR. An integrated genomic-based approach to personalized treatment of patients with advanced-stage ovarian cancer. *J Clin Oncol* (in press).

Potti A, Ganti AK. Adjuvant chemotherapy for early-stage non-small cell lung cancer: the past, the present and the future. *Expert Opin Biol Ther*. 2006 Jul;6(7):709-16.

Chen G, Sircar K, **Potti A**, Goltzman D, Rabbani SA. Expression of RANKL/RANK/OPG in primary and metastatic human prostate cancer as markers of disease stage and functional regulation. *Cancer*. 2006 Jul 15;107(2):289-98.

Bild A, Yao G, Chang JT, **Potti A**, Chasse D, Harpole D, Lancaster JL, Berchuck A, Olson JA, Marks JR, Dressman HK, West M, Nevins JR. Signatures of oncogenic pathway deregulation in human cancers as a guide to targeted therapeutics. *Nature*. Nov 2006 (epub).

Ganti AK, Sahmoun AE, Panwalkar AW, Tendulkar K, **Potti A**. Hormone replacement therapy is associated with decreased survival in women with lung cancer. *J Clin Oncol*. Dec 2005 (epub).

Potti A, Bild A, Dressman H, Lewis DA, Nevins JR, Ortel TL. Gene expression patterns predict phenotypes of cancer mediated thrombosis. *Blood*, Nov 2005. epub..

Ganti AK, **Potti A**. Epidermal growth factor inhibition in solid tumours. *Expert Opin Biol Ther*. 2005 Sep;5(9):1165-1174.

Potti A, Ganti AK, Tuchman SA, Sholes K, Langness E, Koka V, Koch M. HER-2/neu and CD117 (c-kit) overexpression in patients with pesticide exposure and extensive stage small cell lung carcinoma (ESSCLC). *J Carcinog*. 2005;4(1):8

Potti A, Forseen SE, Koka VK, Pervez H, Koch M, Fraiman G, Mehdi SA, Levitt R. Determination of HER-2/neu overexpression and clinical predictors of survival in a cohort of 347 patients with primary malignant brain tumors. *Cancer Invest*. 2004;22(4):537-44.

Potti A, George DJ. Tyrosine kinase inhibitors in renal cell carcinoma. *Clin Cancer Res*. 2004 Sep 15;10 (182):6371-6.

Chen G, Shukeir N, **Potti A**, Sircar K, Aprikian A, Goltzman D, Rabbani SA. Up-regulation of Wnt-1 and beta-catenin production in patients with advanced metastatic prostate carcinoma: potential pathogenetic and prognostic implications. *Cancer*. 2004 Sep 15;101(6):1345-56.

Potti A, Panwalkar A, Langness E, Sholes K, Tendulkar K, Chittajalu S, Koch M. Role of her-2/neu overexpression and clinical features at presentation as predictive factors in meningiomas. *J Clin Oncol*. 2004 Oct;27(5):452-6

Potti A. HER-2/neu overexpression in colorectal carcinoma. *Gastroenterology*. 2004; 122(1):248-9.

Potti A, Rusconi CP, Sullenger BA, Ortel TL. Regulatable aptamers in medicine. *Expert Opin Biol Ther*. 2004; 4(10):1641-7.

Potti A, Ganti AK, Tendulkar K, Sholes K, Chitajallu S, Koch M, Kargas S. Determination of vascular endothelial growth factor (VEGF) overexpression in soft tissue sarcomas and the role of overexpression in leiomyosarcoma. *J Cancer Res Clin Oncol*. 2003;130(1):52-6.

Potti A, Hille RC, Koch M. Immunohistochemical determination of HER-2/neu overexpression in malignant melanoma reveals no prognostic value, while c-Kit (CD117) overexpression exhibits potential therapeutic implications. *J Carcinog*. 2003;2(1):8.

Potti A, Mariani P, Saeed M, Smego RA Jr. Residents as researchers in cancer: expectations, requirements, and productivity. *Am J Med*. 2003;115(6):510-14.

Potti A, Ganti AK, Sholes K, Langness E, Koka V, Horvarth L, Koch M. Effect of pesticide exposure on HER-2/neu overexpression seen in patients with extensive stage small cell lung carcinoma. *Clin Cancer Res*. 2003;9(13):4872-6.

Potti A, Moazzam N, Ramar K, Hanekom DS, Kargas S, Koch M. CD117 (c-KIT) overexpression in patients with extensive-stage small-cell lung carcinoma. *Ann Oncol*. 2003;14(6):894-7.

Foster H, Knox S, Ganti AK, Hebert BJ, Koch M, Tendulkar K, Levitt R, **Potti A**. HER-2/neu overexpression detected by immunohistochemistry in soft tissue sarcomas. *Am J Clin Oncol*. 2003;26(2):188-91.

Potti A, Willardson J, Forseen C, Kishor Ganti A, Koch M, Hebert B, Levitt R, Mehdi SA. Predictive role of HER-2/neu overexpression and clinical features at initial presentation in patients with extensive stage small cell lung carcinoma. *Lung Cancer*. 2002;36(3):257-61.

Potti A, Ganti AK, Koch M, Mehdi SA, Levitt R. Identification of HER-2/neu overexpression and the clinical course of lung carcinoma in non-smokers with chronic lymphocytic leukemia. *Lung Cancer*. 2001;34(2):227-32.

Potti A, Schell DA. Acute adrenal insufficiency due to metastatic lung cancer. *J Clin Oncol*. 2001;19:3780-2.

Potti A, Abdel-Raheem M, Levitt R, Schell DA, Mehdi SA. Intramedullary spinal cord metastases (ISCM) and non-small cell lung carcinoma (NSCLC): clinical patterns, diagnosis and therapeutic considerations. *Lung Cancer*. 2001;31(2-3):319-23.

Pandita D, Steen P, **Potti A**. Risk factors for deep venous thrombosis of the upper extremities. *Ann Intern Med*. 1997;127(12):1129-32.

C. Research Support

ACTIVE

1R01-CA116648-01A1 (Harpole D. H.)	08/21/06-07/31/10	.96 months
National Institutes of Health	\$353,601	
Validating Molecular Signature Risk Models of NSCLC		

This clinical trial will prospectively validate the Duke Lung Metagene Predictor of recurrence in early stage disease and address the importance of adjuvant chemotherapy in 'high risk' stage I patients.

AACR (Potti) 07/01/06-06/30/09 .12 months (concurrent)
American Association for Cancer Research, Inc. \$35,000
Gene expression signatures of oncogenic pathway deregulation provide a novel approach to the selection of targeted therapy

The major goals of this project are to support the research to develop additional signatures of oncogenic pathway deregulation using tumor tissue.

Research (Potti) 11/01/06-10/31/09 1.8 months (concurrent)
The V Foundation \$545,454
A genomic strategy to Src pathway inhibition in non-small cell lung cancer

The major goals of this project are to provide resources and build infrastructure to facilitate the conduct of the clinical trial described in the K12.

Research (Potti) 07/01/06-06/30/08 6 months (concurrent)
Chest Foundation \$75,000

A Genomic Strategy using Src pathway directed therapy in non-small cell lung carcinoma

The major goals of this project are to develop cell line data to add credibility to a clinical trial based on pathway signatures.

Research (Potti) 07/01/07-6/30/12 7.2 calendar
American Cancer Society, Inc. \$675,000

A Genomic Approach to Targeted Therapy in Lung Carcinoma

The goals of this proposal are to build upon a strategy that makes use of gene expression profile information to develop signatures that can predict risk of recurrence combined with signatures that define the deregulation of various oncogenic pathways in non-small cell lung cancer (NSCLC). The goal of this work is an integrated approach to the challenge of personalized treatment of NSCLC patients.

Research (Potti) 09/01/07-08/31/12 (Yrs3-5)1.2 calendar
Burroughs Wellcome Fund \$630,000

Regulating signaling pathways in advanced non-small cell lung cancer - an opportunity for personalized medicine

Biologically dissect the relevance of novel signalling pathways that could then be used in clinical trials, with particular relevance to NSCLC.

Research W81XWH-07-1-0394 (Marcom) 07/01/07-6/30/12 2.4 months
Department of Defense \$626,447

Utilization of Genomic signatures to Direct Use of Primary Chemotherapy in Early Stage Breast Cancer

The major goals of this project are to validate signatures of response to chemotherapies.

PENDING

Research (Potti) 12/01/07-11/30/12 4.8 calendar
National Institutes of Health 1RO10CA131049-01 \$429,273

Prospective validation of genomic signatures of chemosensitivity in NSCLC

Standardize and validate the performance characteristics of the Affymetrix expression microarray platform for use in clinical decision making. Develop a proof of concept study evaluating the benefit of a genomic-guided approach – a phase II trial of customized chemotherapy in advanced NSCLC. Utilize the results from the phase II trial to refine the identification of therapeutic options