

# CURRICULUM VITAE

Tatsuki Koyama, Ph.D.

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## CONTACT INFORMATION

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                      Vanderbilt-Ingram Cancer Center  
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## EDUCATION

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1998    Bachelor of Arts in Statistics  
          University of California at Berkeley, Berkeley, CA  
2000    Master of Arts in Statistics  
          University of Pittsburgh, Pittsburgh, PA  
2003    Doctor of Philosophy in Statistics  
          University of Pittsburgh, Pittsburgh, PA

## DOCTORAL DISSERTATION

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Title             A framework for design of two-stage adaptive procedures  
Advisors         Allan R. Sampson, Ph.D., Leon J. Gleser, Ph.D., H. Samuel Wieand, Ph.D., Ori Rosen, Ph.D.

## AWARDS AND HONORS

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1996    Phi Theta Kappa  
1996    Dean's List, University of California at Berkeley  
1998    W. Homan Scholarship. University of California at Berkeley  
2001    Best Teaching Assistant Award. Department of Statistics, University of Pittsburgh  
2002    Best Senior Graduate Student Award. Department of Statistics, University of Pittsburgh  
2002 - 2003    Andrew Mellon Pre-doctoral Fellowship. University of Pittsburgh  
2003    Best Graduate Student Award. American Statistical Association, Pittsburgh Chapter

## ACADEMIC APPOINTMENTS

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2003 - present    Assistant Professor (Tenure track)  
                      Department of Biostatistics, Vanderbilt University School of Medicine  
                      Cancer Biostatistics Center (formerly Biostatistics Shared Resource)  
                      Vanderbilt-Ingram Cancer Center

## PROFESSIONAL ORGANIZATIONS

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1998 - present    American Statistical Association  
2003 - present    The International Biometric Society  
2006 - present    The Biometric Society of Japan

## PEER REVIEWED PUBLICATION

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### A. Statistical Methodology

1. **Koyama T**, Sampson AR, Gleser LJ. A calculus for design of two-stage adaptive procedures. *J Am Stat Assoc* 2005; **100**(1): 197–203.
2. **Koyama T**, Sampson AR, Gleser LJ. A framework for two-stage adaptive procedures to simultaneously test non-inferiority and superiority. *Stat Med* 2005; **24**(16): 2439–2456.
3. **Koyama T**, Westfall PH. Decision-theoretic views on simultaneous testing of superiority and noninferiority. *J Biopharm Stat* 2005; **15**(6): 943–955.
4. **Koyama T**. Flexible design of two-stage adaptive procedures for phase III clinical trials. *Contemp Clin Trials* 2007; **28**(4): 500–513.
5. **Koyama T**, Chen H. Proper inference from Simon’s two-stage designs. *Stat Med* 2008; **27**(16): 3145–3154.
6. Masaki N, **Koyama T**, Yoshimura I, Hamada C. Optimal two-stage designs allowing flexibility in number of subjects for phase II clinical trials. *J Biopharm Stat* 2009; **19**(4): 721 – 731.

### B. Collaborative

7. Layman W, **Koyama T**. A clinical comparison of LED and halogen curing units. *J Clin Orthod* 2004; **38**(7): 385–387.
8. Rhodes M, Lautz T, Kavanaugh-Mchugh A, Manes B, Calder C, **Koyama T**, Liske M, Parra D, Frangoul H. Pericardial effusion and cardiac tamponade in pediatric stem cell transplant recipients. *Bone Marrow Transplant* 2005; **36**(2): 139–144.
9. Schwartz DA, Connolley CD, **Koyama T**, Wise PE, Herline AJ. Calcaneal ultrasound bone densitometry is not a useful tool to screen patients with inflammatory bowel disease at high risk for metabolic bone disease. *Inflamm Bowel Dis* 2005; **11**(8): 749–754.
10. Keates-Baleeiro J, Moore P, **Koyama T**, Manes B, Calder C, Frangoul H. Incidence and outcome of idiopathic pneumonia syndrome in pediatric stem cell transplant recipients. *Bone Marrow Transplant* 2006; **38**(4): 285–289.
11. Jones E, **Koyama T**, Ho RH, Kuttesch J, Shankar S, Whitlock JA, Cartwright J, Frangoul H. Safety and efficacy of a continuous infusion, patient-controlled antiemetic pump for children receiving emetogenic chemotherapy. *Pediatric blood & cancer* 2007; **48**(3): 330–332.
12. M’Koma AE, Blum DL, Norris JL, **Koyama T**, Billheimer D, Motley S, Ghiassi M, Ferdowsi N, Bhowmick I, Chang SS, Fowke JH, Caprioli RM, Bhowmick NA. Detection of pre-neoplastic and neoplastic prostate disease by MALDI profiling of urine. *Biochem Biophys Res Commun* 2007; **353**(3): 829–834.
13. Sepmeyer JA, Greer JP, **Koyama T**, Zic JA. Open-label pilot study of combination therapy with rosiglitazone and bexarotene in the treatment of cutaneous T-cell lymphoma. *J Am Acad Dermatol* 2007; **56**(4): 584–587.
14. Blum DL, **Koyama T**, M’koma AE, Iturregui JM, Martinez-Ferrer M, Uwamariya C, Smith JA, Clark PE, Bhowmick NA. Chemokine markers predict biochemical recurrence of prostate cancer following prostatectomy. *Clin Cancer Res* 2008; **14**(23): 7790–7797.
15. Branner CM, **Koyama T**, Jensen GL. Racial and ethnic differences in pediatric obesity-prevention counseling: national prevalence of clinician practices. *Obesity* 2008; **16**(3): 690–694.

16. Dar AA, Zaika A, Piazuolo MB, Correa P, **Koyama T**, Belkhiri A, Washington K, Castells A, Pera M, El-Rifai W. Frequent overexpression of Aurora Kinase A in upper gastrointestinal adenocarcinomas correlates with potent antiapoptotic functions. *Cancer* 2008; **112**(8): 1688–1698.
17. Edelblum KL, Goettel JA, **Koyama T**, McElroy SJ, Yan F, Polk DB. TNFR1 promotes tumor necrosis factor-mediated mouse colon epithelial cell survival through RAF activation of NF- $\kappa$ B. *J Biol Chem* 2008; **283**(43): 29,485–29,494.
18. Edelblum KL, Washington MK, **Koyama T**, Robine S, Baccarini M, Polk DB. Raf protects against colitis by promoting mouse colon epithelial cell survival through NF-kappaB. *Gastroenterology* 2008; **135**(2): 539–551.
19. Kawaguchi M, Hager HA, Wada A, **Koyama T**, Chang MS, Bader DM. Identification of a novel intracellular interaction domain essential for Bves function. *PLoS ONE* 2008; **3**(5): e2261.
20. Li X, Placencio V, Iturregui JM, Uwamariya C, Sharif-Afshar AR, **Koyama T**, Hayward SW, Bhowmick NA. Prostate tumor progression is mediated by a paracrine TGF- $\beta$ /Wnt3a signaling axis. *Oncogene* 2008; **27**(56): 7118–7130.
21. Stumph J, Vnencak-Jones CL, **Koyama T**, Frangoul H. Comparison of peripheral blood and bone marrow samples for detection of post transplant mixed chimerism. *Bone Marrow Transplant* 2008; **41**(6): 589–590.
22. Frangoul H, **Koyama T**, Domm J. Etanercept for treatment of idiopathic pneumonia syndrome after allogeneic hematopoietic stem cell transplantation. *Blood* 2009; **113**(12): 2868–9.
23. Pallavaram S, Dawant BM, **Koyama T**, Yu H, Neimat J, Konrad PE, D’Haese PF. Validation of a Fully Automatic Method for the Routine Selection of the Anterior and Posterior Commissures in Magnetic Resonance Images. *Stereotact Funct Neurosurg* 2009; **87**(3): 148–154.
24. Piro CC, Crossno CL, Collier A, Ho R, **Koyama T**, Frangoul H. Initial vancomycin dosing in pediatric oncology and stem cell transplant patients. *J Pediatr Hematol Oncol* 2009; **31**(1): 3–7.
25. Rosen MJ, Moulton DE, **Koyama T**, Morgan WM, Morrow SE, Herline AJ, Muldoon RL, Wise PE, Polk DB, Schwartz DA. Endoscopic ultrasound to guide the combined medical and surgical management of pediatric perianal Crohn’s disease. *Inflamm Bowel Dis* 2009; **Epub**.
26. Sisler IY, Koehler E, **Koyama T**, Domm JA, Ryan R, Levine JE, Pulsipher MA, Haut PR, Schultz KR, Taylor DS, Frangoul HA. Impact of conditioning regimen in allogeneic hematopoietic stem cell transplant for children with AML beyond first complete remission: a pediatric blood and marrow transplant consortium (PBMTTC) study. *Biology of Blood and Marrow Transplantation* 2009; **Epub**.
27. Ware LB, **Koyama T**, Billheimer DD, Wu W, Parsons P, Thompson BT, Brower R, Standiford T, Martin TR, Bernard GR. Prognostic and Pathogenetic Value of Combining Clinical and Biochemical Indices in Patients with Acute Lung Injury. *Chest* 2009; .
28. Weitkamp H, Rudzinski E, **Koyama T**, Correa H, Matta P, Alberty JB, Polk DB. Ontogeny of FOXP3+ Regulatory T Cells in the Postnatal Human Small Intestinal and Large Intestinal Lamina Propria. *Pediatr Dev Pathol* 2009; **Epub**.

### C. Under Review/Revision

29. Andres MJ, **Koyama T**, Mascharenas M, Shulman RJ. Nutrition education for pediatric gastroenterology, hepatology and nutrition fellows: a survey of NASPGHAN fellowship training programs. *under review*.
30. Fremont RD, **Koyama T**, Calfee CS, Wu W, Dossett LA, Bossert FR, Mitchell D, Wickersham N, Bernard GR, Matthay MA, May AK, Ware LB. Acute lung injury in patients with traumatic injuries: utility of a panel of biomarkers for diagnosis and pathogenesis. *under review*.

31. Kassim AA, Kato K, **Koyama T**, Delbeke D, Mudasiru EF, Jones C, Greer JP, Chinratanalab W, Jagasia M, Goodman S, Morgan DS, Schuening FG, Mineishi S. Pre and post-transplant fluorine  $^{18}\text{F}$  fluorodeoxyglucose positron emission tomography (PET) correlated with long-term outcome in patients with aggressive non-Hodgkin lymphoma undergoing high dose chemotherapy followed by autologous stem cell transplantation. *under review*.
32. Love HD, Booton SE, Boone BE, Breyer JP, **Koyama T**, Revelo MP, Shappell SB, Smith JR, Hayward SW. Androgen regulated genes in human prostate xenografts in mice: relation to BPH and prostate cancer. *under review*.

## PROFESSIONAL ACTIVITIES

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### A. Extramural Services

2005 - 2006	Chapter Representative, American Statistical Association Middle Tennessee Chapter
2006 - present	Treasurer, American Statistical Association Middle Tennessee Chapter
2008	NIH Study Section, Review panel. "Tumor stem cells in cancer biology, prevention, and therapy (P01)"
2009	NIH Study Section, Review panel. "Measures and determinants of smokeless tobacco use, prevention, and cessation (R01)"
2009	Data and Safety Monitoring Board. "Beta Agonists for Oxygenation in Lung Donors: The BOLD Study"

### B. Extramural Seminars, Lectures, and Presentations

#### Tutorial session

1. Adaptive and flexible designs in clinical trials. *The 2006 Japanese Joint Statistical Meetings*. Sendai, Japan. September 5, 2006 (3 hour tutorial).

#### Short course

2. Adaptive and flexible designs in clinical trials. *An invited lecture at the Japan Clinical Research, Lilly Research Laboratories Japan*. Kobe, Japan. March 1, 2007 (2 hour course)
3. Adaptive designs in clinical trials. *Biostatistics Summer School*. Osaka University, Osaka, Japan. July 9 - 10, 2007 (9 hour course).

#### Invited presentation

4. A calculus for design of two-stage adaptive procedures. *Workshop on Adaptive Designs*. The Fields Institute, Toronto, Ontario, Canada. September 25 - 27, 2003.
5. A flexible method for design of two-stage adaptive procedures. *Meisei University*, Tokyo, Japan. December 15, 2003.
6. Two-stage adaptive procedures for simultaneously testing noninferiority and superiority. *American Statistical Association Middle Tennessee Chapter Meeting*. Nashville, TN. February 27, 2004.
7. Proper inference from Simon's two-stage designs. *Conference and Celebration for Leon Gleser and Tom Savits*. Department of Statistics, University of Pittsburgh. Pittsburgh, PA. May 5 - 6, 2006.
8. Applications of adaptive designs. *The 2006 Japanese Joint Statistical Meeting*. Sendai, Japan. September 7, 2006.
9. Applications of adaptive designs in phase II clinical trials. *Tokai Medical Association*, Isehara, Japan. September 11, 2006.

10. Miscellaneous topics in probability. *American Statistical Association Middle Tennessee Chapter Meeting*. Nashville, TN. October 27, 2006.
11. Inference from general adaptive designs. *Grants-in-Aid Conference on Applications of Multiple Decision Making in Clinical Drug Development*. Kobe, Japan. February 27 - 28, 2007.
12. Flexible designing of a two-stage adaptive procedures. *Targeted Designs for Clinical Trials*. Philadelphia, PA. July 19 - 20, 2007.
13. Bayesian statistics in academics in the United States. *Bayesian Statistics and the Future of Clinical Trials*. StatCom Company Fifth Anniversary Symposium, Tokyo, Japan. December 5, 2008.

#### Contributed Presentations

14. Flexible designing of two-stage adaptive procedures. *ENAR Spring Meeting*. Pittsburgh, PA. March 28 -31, 2004.
15. Combinations of two-stage designs for testing multiple treatments in phase II cancer trials. *ENAR Spring Meeting*. Austin, TX. March 20 -23, 2005.
16. Significant design components in general two-stage adaptive procedures. *Joint Statistical Meeting*. Minneapolis, MI. August 7 - 11, 2005.

#### Contributed Posters

17. Two-stage procedures for simultaneously testing noninferiority and superiority. *Midwest Biopharmaceutical Statistical Workshop*. Muncie, IN. May 24 - 26, 2004.

#### Web Applications

Proper inference from Simon's two-stage designs.

(<http://biostat.mc.vanderbilt.edu/wiki/Main/TwoStageInference>)

Characteristics of 3+3 designs in phase I clinical trials.

(<http://data.vanderbilt.edu/~koyamat/brew/t33.html>)

Dotplot. (<http://data.vanderbilt.edu/~graywh/dotplot/>)

#### C. Journal Review

American Statistician

Bioinformatics

the Journal of Statistical Planning and Inference

Statistics in Medicine

Clinical Cancer Research

#### D. Intramural Services

University of Pittsburgh

2000 Statistics Computer Lab Coordinator

2000 - 2002 Statistical Consultant, Center for Statistics

## Vanderbilt University Medical Center

- 2003 - present Director, Administrative/Biostatistics Core, Digestive Disease Research Center
- 2003 - 2005, 2007 - present  
Member, Ph.D. Search Committee, Department of Biostatistics
- 2007 - present Reviewer, Vanderbilt Committee for Internal Pre-review of Grant Application
- 2009 - present Reviewer, Scientific Review Committee, Vanderbilt-Ingram Cancer Center
- 2009 - present Chair, Early Phase Clinical Trial Planning Committee, Cancer Biostatistics Center, Vanderbilt-Ingram Cancer Center
- 2009 - present Organizer, Cancer Biostatistics Workshop, Cancer Biostatistics Center, Vanderbilt-Ingram Cancer Center

## E. Intramural Seminars, Lectures, and Presentations (since 2003)

### Invited Lectures and Presentations

1. Introduction to statistics in R. *Seminar series in biostatistics*. Department of Biostatistics. 2004
2. Probabilities and statistics in medicine. *Guest lecturer for Department of Preventive Medicines' required course*. 2004 - 2007.
3. Power and sample size - a practical point of view. *Guest lecture for MSCI course, Biostatistics I*. 2004.
4. Tools for formal statistical inference. *Statistical thinking in biomedical research*. Department of Biostatistics. 2004.
5. General two-stage adaptive designs in phase III clinical trials. *Biostatistics seminar*. Department of Biostatistics. 2005.
6. Problems with using Excel for statistics. *GCRC research skills workshop series*. 2005.
7. An introduction to two-stage adaptive designs. *GCRC research skills workshop series*. 2005.
8. Proper inference from Simon's two-stage designs. *Biostatistics seminar*. Department of Biostatistics. 2007
9. Miscellaneous topics in probability and statistics. *Cancer Biostatistics Center luncheon*. 2007
10. Statistical methods in biomarker discovery. *Clinical proteomics*. Vanderbilt University School of Medicine. 2008 & 2009.
11. Adaptive phase II clinical trials: rigorous statistics and flexible science. *2008 Cancer biostatistics workshop*. Cancer Biostatistics Center.
12. Bayesian biostatistics. *Cancer Biostatistics Center luncheon*. 2008
13. Statistical methods in biomarker discovery. *2009 Cancer biostatistics workshop*. Cancer Biostatistics Center. 2009
14. Technical aspects of interim monitoring in clinical trials. *GCRC Research skills workshop series*. 2009

## F. Mentoring

Mingsheng Guo, PhD. Bioinformatician.

Department of Biostatistics, Vanderbilt University School of Medicine.

Elizabeth Koehler, MS. Biostatistician III.

Department of Biostatistics, Vanderbilt University School of Medicine.

Zhguo Zhao, MS. Biostatistician II.

Department of Biostatistics, Vanderbilt University School of Medicine.

Lan Cui, MS. Research Assistant I.  
Department of Biostatistics, Vanderbilt University School of Medicine.

## TEACHING ACTIVITIES

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### Teaching Positions

1998 - 2002 Teaching Fellow / Teaching Assistant, Department of Statistics, University of Pittsburgh  
2000 Lecturer, Department of Statistics, University of Pittsburgh

## RESEARCH PROGRAMS

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### Current

- 5 R01 CA108646-05** (Bhowmick) 08/01/2004 - 05/31/2010 0.60 Calender (5.0%)  
NCI Role: Co-investigator  
“TGF $\beta$  Signals in Prostate Stromal-Epithelial Interactions”  
The major goal of this project is to specifically identify the TGF $\beta$ -mediated signals in the stroma that mediate prostate androgen responsiveness.
- 5 R01 EB006193-03** (Dawant) 05/01/2007 - 02/28/2011 0.60 Calender (5.0%)  
NIBIB Role: Co-investigator  
“Autosegmentation for Head and Neck Radiotherapy Planning”  
The major goal of this project is to develop, implement, and test the methodology required to automate the segmentation of structures in the treatment of patients with intracranial and head-and-neck cancers.
- 1 R01 CA131225-01A2** (El-Rifai) 06/01/2009 - 04/30/2014 0.6 Calender (5.0%)  
NCI Role: Co-investigator  
“The Role of Aurora Kinase A in Upper Gastrointestinal Adenocarcinomas”  
The major goal of this project is to characterize the role of AURKA in GEC tumorigenesis to identify its biological, clinical, diagnostic, and prognostic value.
- 1 R01 CA133738-01A2** (El-Rifai) 08/13/2009 - 07/31/2012 0.3 Calender (2.5%)  
NCI Role: Co-investigator  
“The Role of t-Darpp in Upper Gastrointestinal Adenocarcinomas.”  
The major goals of this project are to identify t-Darpp’s molecular signaling targets and to characterize t-Darpp effects on apoptosis and trastuzumab resistance.
- 1 R01 HD059253-02** (Malow) 04/01/2008 - 03/31/2010 0.30 Calender (2.5%)  
NINDS Role: Co-investigator  
“Melatonin for Sleep in Children with Autism: Safety, Tolerability, and Dosing”  
The major goals of this project are to optimize the intervention strategy for administering supplemental melatonin in children with ASD; characterize the pharmacokinetic profile of supplemental melatonin; and pilot a group of behavioral and parental stress scales in preparation for an RCT.
- 5 P30 CA068485-13** (Pietenpol) 09/28/2004 - 08/31/2009 2.4 Calender (20.0%)  
NCI Role: Co-investigator  
“Cancer Center Support Grant”  
The major goal of this project is to coordinate the cancer-related activities of Vanderbilt University.

**2 R01 DK056008-11** (Polk) 08/01/2009 - 07/31/2014 0.60 Calender (5.0%)  
NIDDK Role: Co-investigator  
“Cytokine Regulation of Intestinal Epithelial Restitution”  
The major goal of this project is to characterize the role of the TNFRs in regulating intestinal epithelial cells in health and after injury.

**5 P30 DK058404-08** (Polk) 08/30/2007 - 05/31/2012 1.20 Calender (10.0%)  
NIDDK Role: Core leader  
“Molecular and Cellular Basis of Digestive Diseases”  
The major goal of this project is to investigate the molecular and cellular mechanisms responsible for digestive diseases.

**5 U01 HL081332-04** (Ware) 08/12/2005 - 06/30/2010 2.4 Calender (20.0%)  
NHLBI Role: Co-investigator  
“Biomarker Profiles in the Diagnosis/Prognosis of ARDS”  
The major goal of this project is to utilize a multi-disciplinary clinical proteomics approach to identify biomarkers for the diagnosis and prognosis of acute respiratory distress syndrome (ARDS).

**1 R01 HL088263-01A1** (Ware) 02/01/2008 - 01/31/2013 0.6 Calender (5.0%)  
NHLBI Role: Co-investigator  
“Treatment of pulmonary edema in organ donors”  
The major goal of this project is to determine whether administration of an aerosolized beta-2 agonist in brain-dead organ donors will improve: 1) donor oxygenation by enhancing clearance of pulmonary edema and 2) donor lung procurement rates.

**1 R01 DK081134-01A1** (Yan) 04/01/2009 - 03/31/2014 0.48 Calender (4.0%)  
NIDDK Role: Biostatistician  
“Probiotics-Derived Soluble Proteins Regulate Intestinal Inflammation”  
The major goals of this project are to investigate the relationships between p40 and intestinal cell survival, inflammation, and apoptosis.

### Pending

**DOD PC081246** (Bhowmick) 04/01/2009 - 03/31/2012 1.20 Calender (10.0%)  
DOD Role: Co-investigator  
“Regulation and Function of Cytokines that Predict Prostate Cancer Metastasis”  
The major goal of this project is to identify the biologic role of specific chemokines shown to predict biochemical prostate cancer recurrence following prostatectomy.

**2 R01 CA106176-07** (El-Rifai) 04/01/2010 - 03/31/2011 0.60 Calender (5.0%)  
NCI Role: Co-investigator  
“Molecular Pathobiology of Barrett’s Tumorigenesis”  
The major goal of this project is to discover novel diagnostic and/or prognostic molecular markers for Barrett’s carcinomas.

**1 R01 DK087962-01** (Fowke) 04/01/2010 - 03/31/2015 1.20 Calender (10.0%)  
NIDDK Role: Co-investigator  
“Biomarkers of Obesity, Prostate Tissue Inflammation, and BPH Progression”  
The major goal of this project is to investigate the molecular/cellular and clinical associations among obesity, prostate inflammation, and prostate hyperplasia.

**1 P50** (Ware) 01/01/2010 - 12/31/2015 2.40 Calender (20.0%)  
NHLBI Role: Core leader  
“Vanderbilt Proteomic Center in Acute Lung Injury”  
The major goal of this project is to use proteomic-based research methods to investigate acute lung injury.

**1 U01 CA142565-01** (Yankeelov) 12/01/2009 - 11/30/2014 1.20 Calender (10.0%)  
NCI Role: Co-investigator  
“PET-MRI for Assessing Treatment Response in Breast Cancer Clinical Trials”  
The major goal of this project is to provide the breast cancer community with practical data acquisition and analysis protocols that facilitate the translation of advanced imaging technologies into clinical practice.

### Complete

**2 P50 CA098131-06** (Arteaga) 09/11/2008 - 05/31/2013 1.56 Calender (13%)  
NCI Role: Co-investigator  
“SPORE in Breast Cancer”  
The major goal of this project is to address basic, clinical, and population research questions in breast cancer.

**5 R21 DK069527-02** (Bhowmick) 09/30/2004 - 08/31/2008 0.60 Calender (5.0%)  
NIDDKD Role: Co-investigator  
“TGF $\beta$  Signaling in the Bladder Stroma”  
The major goal of this project is to explore the TGF $\beta$ -mediated signals in the stroma that mediate bladder estrogen and androgen responsiveness associated with bladder stromal hyperplasia.

**5 P50 CA090949-08** (Carbone) 06/28/2001 - 03/31/2012 2.40 Calender (20.0%)  
NIH/NCI Role: Co-investigator  
“SPORE in Lung Cancer”  
The major goal of this project is to investigate the molecular features of tumors or tumor-host interactions to identify targets for intervention and improve outcomes for lung cancer patients.

**5 K24 CA080908-05** (Carbone) 06/17/1999 - 05/31/2005 0.60 Calender (5.0%)  
NIH/NCI Role: Co-investigator  
“Molecular Therapeutics of Cancer”  
The major goal of this project is to enable the partnering of premiere institutions based in the Lung Cancer SPORE program to determine how the information derived from comprehensive molecular analyses can be used to improve patient care and outcomes.

**5 P01 CA077839-10** (DuBois) 05/01/2004 - 04/30/2010 Calender (%)  
NIH/NCI Role: Co-investigator  
“Mechanisms for Chemoprevention of Cancer”  
The major goal of this project is to determine the molecular mechanisms involved in the chemoprevention of cancer by NSAIDs.

**5 R01 CA106176-06** (El-Rifai) 03/20/2006 - 06/30/2008 0.36 Calender (3%)  
NCI Role: Co-investigator  
“Biomarkers in Barrett’s Tumorigenesis”  
The major goal of this project is to discover novel diagnostic and/or prognostic molecular markers for Barrett’s carcinomas.

**2R01 CA093999-07A2** (El-Rifai) 07/01/2008 - 04/30/2013 0.48 Calender (4%)  
 NCI Role: Co-investigator  
 “Gene Amplification and Overexpression at 17q in Gastric Cancer”  
 The major goal of this project is to investigate the prevalence of 17q alterations in gastric cancer and identify critical changes at this chromosomal region.

**AICR** (Fowke) 02/01/2005 - 01/31/2007 0.60 Calender (5.0%)  
 American Institute for Cancer Research Role: Co-investigator  
 “Effects of Brassica or Indole-3-Carbinol in Prostatectomy Patients with PSA Recurrence”  
 The major goal of this project is to determine the effect of a diet rich in Brassica vegetables, or a non-nutrient diet supplement containing the Brassica-derived chemical believed to be biologically active, on PSA velocity.

**2005 Research Reward** (Fowke) 04/01/2006 - 03/31/2008 1.20 Calender (10.0%)  
 Prostate Cancer Foundation Role: Co-investigator  
 “Glitazones and Prostate Cancer Risk in a Large Cohort of Men with Type II Diabetes”  
 The major goal of this project is to determine the duration of glitazone use, age at use, and most effective glitazone associated with reduced prostate cancer risk.

**W81XWH-04-1-0867** (Hayward) 09/10/2004 - 09/14/2007 0.60 Calender (5.0%)  
 DOD Role: Co-investigator  
 “An Myc-driven in Vivo Model of Human Prostate Cancer”  
 The major goal of this project is to develop a novel in vivo model of human prostate cancer based upon overexpression of the cMyc proto-oncogene.

**VUMC Discovery Grant** (Koyama) 07/01/2007 - 06/30/2009 1.20 Calender (10.0%)  
 VUMC Role: Principal investigator  
 “Proper Inference from a Simon’s Design When the Sample Size is Changed”  
 The major goal of this project is to develop a new analysis method that will compute a more accurate or proper p-value and confidence intervals for two-stage clinical trials.

**LAF Research Award** (Matthews) 01/01/2006 - 12/31/2007 1.08 Calender (9.0%)  
 Lance Armstrong Foundation Role: Co-investigator  
 “Exercise Intervention for Chemotherapy-Related Cognitive Dysfunction”  
 The major goal of this project is to investigate the effects of exercise on chemotherapy-related cognitive dysfunction.

**5 U54 CA091405-07** (Moses) 09/25/2006 - 07/31/2011 0.60 Calender (5.0%)  
 NCI Role: Biostatistician  
 “MMC and VICC: Partners in Eliminating Cancer Disparities”  
 The major goal of this project is to support a comprehensive cancer research partnership between MMC and VICC.

**5 P50 GM015431-42** (Oates) 07/03/2006 - 06/30/2011 0.60 Calender (5.0%)  
 NIH/NIGMS Role: Biostatistician  
 “Research Center for Pharmacology and Drug Toxicology”  
 The major goal of this project is to support research related to eicosanoid biology and pharmacology.

**5 U01 CA099177-05** (Rothenberg) 03/14/2003 - 02/28/2009 0.84 Calender (7.0%)  
 NCI Role: Co-investigator  
 “Vanderbilt Phase I Translational Research Program”  
 The major goal of this project is to conduct early-phase, dose-ranging trials of new anticancer agents to characterize their toxicity, pharmacology, and effects on molecular targets.