

# Yibin Kang, Ph.D.

Warner-Lambert/Parke-Davis Professor of Molecular Biology  
Princeton University

## Personal Data

Office Address: Department of Molecular Biology  
Princeton University  
Lewis Thomas Lab 255  
Washington Road  
Princeton, NJ 08544

Phone: (609) 258-8834 (Office); (609) 258-9120 (Lab)  
Fax: (609) 258-2340

E-mail: [ykang@princeton.edu](mailto:ykang@princeton.edu)  
URL: <http://scholar.princeton.edu/kanglab>

## Education

• 1991-1995	B.S. (Genetics)	Fudan University, Shanghai, China (June, 1995)
• 1995-1996	Ph.D. candidate	Michigan State University, East Lansing, MI
• 1996-2000	Ph.D. (Genetics)	Duke University, Durham, NC (May, 2000)
• 2000-2004	Postdoctoral	Memorial Sloan-Kettering Cancer Center, New York, NY

## Honors and Awards

- 1990 First prize, National High School Chemistry Competition, China  
Member, National Select Team for the 22<sup>nd</sup> International Chemistry Olympiad
- 1991-1995 Fudan University Scholarships: People's Scholarship (91-95); Mao Cheng-Si Scholarship (93); Xu Zeng-Shou Scholarship (94)
- 2001-2004 Irvington Institute Postdoctoral Fellowship for Immunological Research
- 2004 AIMM-ASBMR John Haddad Young Investigator Award
- 2004 Memorial Sloan-Kettering Cancer Center Annual Postdoctoral Research Award
- 2005 Paget Foundation Young Investigator Award
- 2005 American Cancer Society Research Scholar Award
- 2006 Department of Defense Breast Cancer Research Program Era of Hope Scholar Award
- 2009 Champalimaud Investigator, Champalimaud Foundation, Portugal
- 2010 Inaugural Oudang Distinguished Lectureship, Korean Pharmaceutical Society
- 2011 Vilcek Prize for Creative Promise in Biomedical Science
- 2011 Great Immigrants: The Pride of America Honoree, Carnegie Corporation of New York
- 2012 AACR Award for Outstanding Achievement in Cancer Research
- 2013 Pillars of Excellence, Rutgers Cancer Institute of New Jersey
- 2013 Axios Award of the AHEPA 5th District Cancer Research Foundation
- 2013 Chinese Biological Investigator Society Distinguished Young Investigator Award
- 2014 Josh Fidler Innovation Award, Metastasis Research Society
- 2014 Fuller Albright Award, American Society for Bone and Mineral Research
- 2014 AACR Outstanding Investigator Award for Breast Cancer Research, Funded by Susan G. Komen

- 2016 Komen Scholar
- 2016 Inaugural inductee, Duke Graduate School Few-Glasson Alumni Society
- 2016 AAAS Fellow

### **Professional Experience**

- 1993-1995 *Undergraduate Research Assistant at Dr. **Jianhua Chai**'s Laboratory, Department of Genetics, Fudan University, Shanghai, China*  
Physical and expression mapping of the subcentromeric regions (Xp11.2 and Xp21.1-21.3) in the short arm of the human X chromosome
- 1996-2000 *Graduate Research Assistant at Dr. **Bryan R. Cullen**'s Laboratory Department of Genetics and Howard Hughes Medical Institute Duke University Medical Center, Durham, NC*  
Transcriptional and post-transcriptional regulation of eukaryotic gene expression, using retroviruses as a model system
- 2000-2004 *Postdoctoral Research Associate at Dr. **Joan Massagué**'s Laboratory Cancer Biology and Genetics Program and Howard Hughes Medical Institute Memorial Sloan-Kettering Cancer Center, New York*  
Functional genomic analysis of breast cancer bone metastasis  
TGF- $\beta$  cytotaxis program and the role of TGF- $\beta$  in tumorigenesis and metastasis of human cancer
- 2004.9-2010.2 *Assistant Professor*
- 2010.2-2012.7 *Associate Professor (Tenured)*
- 2012.7 *Professor*
- 2012.7-present *Warner-Lambert/Parke-Davis Professor of Molecular Biology (Endowed) Department of Molecular Biology, Princeton University, Princeton, NJ*  
Tumor-stromal interactions in breast cancer progression, metastasis and treatment resistance  
Molecular pathogenesis of bone metastasis  
Cell fate regulation and epithelial plasticity in mammary stem cell and breast cancer progression

### **Affiliated appointments:**

- 2004-present Member, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
- 2015-present Affiliated Faculty, Quantitative & Computational Biology, Lewis Sigler Institute of Integrative Genomics, Princeton University
- 2016-present Affiliated Faculty, Global Health Program, Woodrow Wilson School, Princeton University
- 2016-present Affiliated Faculty, Center for Health and Wellbeing, Woodrow Wilson School, Princeton University

### **Teaching**

#### Major role:

<i>Semester</i>	<i>Course title</i>	<i>Co-instructor</i>
Spring 2006-2012	Molecular Basis of Cancer (MOL523)	Jim Broach
Spring 2008-2012	The Power and Peril of Cycling Cells (MOL430)	Hilary Collier
Spring 2014-present	Molecular Basis of Cancer (MOL523/MOL423)	

#### Minor role:

Fall 2008-present	Data Processing Workshop for New Graduate Students	(one lecture)
Spring 2004-2005	Molecular Basis of Cancer (MOL523)	(one lecture)
June 2007	BioMaPS Summer School on Cancer	(one lecture)
	Biology and Bioinformatics at Rutgers University, NJ	
Summer 2006-2011	HHMI Summer Research Program	(one lecture)
Spring 2011	Medical Research and Researchers: Preeminence, Problems, Policies (MOL328/WWS399)	(one lecture)

## Peer-reviewed Publications

### *As a graduate student:*

1. **Kang Y**, Blair WS, and Cullen BR. (1998) Identification and functional characterization of a high affinity Bel-1 DNA binding site located in the human foamy virus internal promoter. *J. Virol.*, 72:504-11.
2. **Kang Y**, and Cullen BR. (1998) Derivation and functional characterization of the consensus DNA binding sequence for the Tas transcriptional activator of simian foamy virus type 1. *J. Virol.*, 72:5502-9.
3. **Kang Y**, and Cullen BR. (1999) The human Tap protein is a nuclear mRNA export factor that contains novel RNA binding and nucleocytoplasmic transport sequences. *Genes & Dev.*, 13:1126-39.  
*Editorial by:* Strambio-de-Castillia C, and Rout MP. (1999) *Nature Cell Biol.*, 1: E31-2.
4. **Kang Y**, Bogerd H, Yang J, and Cullen BR. (1999) Analysis of the RNA binding specificity of the human Tap nuclear RNA export factor. *Virology*, 262:200-9.
5. Truant R\*, **Kang Y\***, and Cullen BR. (1999) The human Tap nuclear RNA export factor contains a novel transportin dependent NLS that lacks NES function. *J. Biol. Chem.*, 274:32167-71.\* Equal contributions.
6. **Kang Y**, Bogerd H, and Cullen BR. (2000) Analysis of cellular factors that mediate nuclear export of RNAs bearing the Mason-pfizer monkey virus constitutive transport element. *J. Virol.*, 74:5863-71.
7. Neufeld KL, Nix DA, Bogerd H, **Kang Y**, Beckerle MC, Cullen BR, and White RL. (2000) Nuclear export of Adenomatous Polyposis Coli protein regulate  $\beta$ -Catenin levels in the nucleus. *Proc. Natl. Acad. Sci.*, 97:12085-90.
8. Coburn GA, Wiegand HL, **Kang Y**, Ho DN, Georgiadis MM, and Cullen BR. (2001) Using viral species specificity to define a protein: RNA interaction surface. *Genes & Dev.*, 15:1194-205.
9. Wiegand HL, Coburn GA, Zeng Y, **Kang Y**, Bogerd HP, and Cullen BR. (2002) Formation of Tap/NXT1 heterodimers activates Tap-dependent nuclear mRNA export by enhancing recruitment to nuclear pore complex. *Mol. Cell Biol.*, 22:245-56.
10. Ho DN, Coburn GA, **Kang Y**, Cullen BR, and Georgiadis MM. (2002) The crystal structure and mutational analysis of a novel RNA-binding domain found in the human Tap nuclear mRNA export factor. *Proc. Natl. Acad. Sci.*, 99:1888-93.
11. Bodem J, **Kang Y** and Flügel RM. (2004) Comparative functional characterization of the feline foamy virus transactivator reveals its species specificity. *Virology*, 318:32-6.

**As a postdoctoral fellow:**

12. Chen C\*, **Kang Y\***, and Massagué J. (2001) Defective repression of *c-myc* in breast cancer cells: A loss at the core of the TGF- $\beta$  growth arrest program. *Proc. Natl. Acad. Sci.*, 98:992-9. \* Equal contributions.
13. Chen C, **Kang Y**, Siegel PM, and Massagué J. (2002) E2F4/5 and p107 as Smad cofactors linking the TGF $\beta$  receptor to *c-myc* repression. *Cell*, 110:19-32.  
*Editorial by:* Kowalik TF. (2002) *Mol. Cell*, 10:7-8.
14. Xu L, **Kang Y**, Col S, and Massagué J. (2002) Smad2 nucleocytoplasmic shuttling by nucleoporins CAN/Nup214 and Nup153 feeds TGF $\beta$  signaling complexes in the cytoplasm and nucleus. *Mol. Cell*, 10:271-82.  
*Editorial by:* Heinrichs A. (2002) *Nature Reviews Mol. Cell Biol.*, 3:728.
15. **Kang Y**, Chen C, and Massagué J. (2003) A self-enabling TGF $\beta$  response coupled to stress signaling: Smad engages stress response factor ATF3 for *Id1* repression in epithelial cells. *Mol. Cell*, 11:915-26.
16. **Kang Y**, Siegel PM, Shu WP, Drobnjak M, Kakonen SM, Cordon-Cardo C, Guise TA, and Massagué J. (2003) A multigenic program mediating breast cancer metastasis to bone. *Cancer Cell*, 3:537-49. **(Cover Article)**  
*Editorial by:* Hynes RO. (2003) *Cell*, 113:821-23.  
Pilcher HR. (2003) *Nature*, 424:143.  
van't Veer LJ, and Weigelt B. (2003) *Nature Medicine*, 9:999-1000.  
Greenwood E. (2003) *Nature Reviews Cancer*, 3:549.  
Welch DR. (2004) *Breast Cancer Research*, 6:61-4.
17. **Kang Y** and Massagué J. (2004) Epithelial-mesenchymal transition: twist in development and metastasis. *Cell*, 118:277-9.
18. Minn AJ, **Kang Y**, Gupta G, Panomarev V, Serganova I, Blasberg R, and Massagué J. (2005) Distinct organ-specific metastasis potential of individual breast cancer cells carrying a uniform poor-prognosis gene expression signature. *J. Clin. Invest.*, 115:44-55.  
*Editorial by:* Hutchinson E. (2005) *Nature Reviews Cancer*, 5:88.
19. **Kang Y**, He W, Tulley S, Gupta GP, Serganova I, Chen C, Manova-Todorava K, Blasberg R, Gerald WL, and Massagué J. (2005) Breast cancer bone metastasis mediated by Smad tumor suppressor pathway. *Proc. Natl. Acad. Sci.*, 102: 13909-14.
20. Gupta GP, Minn AJ, **Kang Y**, Siegel PM, Serganova I, Cordon-Cardo C, Olshen AB, Gerald WL, and Massagué J. (2005) Identifying site-specific metastasis genes and functions. *Cold Spring Harb. Symp. Quant. Biol.*, 70: 1-10.

**As a principal investigator:**

21. **Kang Y** (2005) Functional genomics analysis of cancer metastasis: biologic insights and clinical implications. *Expert Rev. Mol. Diagn.*, 5: 385-95.

22. **Kang Y.** (2006) Pro-metastatic function of TGF $\beta$  mediated by the Smad pathway. *J. Cell. Biochem.*, 98: 1380-90.
23. Li F, Tiede B, Massagué J and **Kang Y.** (2007) Beyond tumorigenesis: cancer stem cells in metastasis. *Cell Res.*, 17:3-14.
24. **Kang Y.** (2007) New tricks against an old foe: dissecting tissue tropism in breast cancer metastasis. *Breast Disease*, 26:129-38.
25. Zhu J, Jia X, Xiao G, **Kang Y.**, Partridge C and Qin L. (2007) EGF-like ligands stimulate osteoclastogenesis by regulating expression of osteoclast regulatory factors in osteoblasts: implications in osteolytic bone metastases. *J. Biol. Chem.*, 282:26656-64.
26. Lu X and **Kang Y.** (2007) Organotropism of breast cancer metastasis. *J. Mammary Gland Biol. Neoplasia*, 12:153-62.
27. Korpala M, Lee ES, Hu G, and **Kang Y.** (2008) The miR-200 family inhibits epithelial-mesenchymal transition and cancer cell migration by direct targeting of E-cadherin transcriptional repressors ZEB1 and ZEB2. *J. Biol. Chem.*, 283:14910-4.
28. Korpala M and **Kang Y.** (2008) The emerging role of the miR-200 family microRNAs in epithelial-mesenchymal transition and cancer metastasis. *RNA Biology*, 5:112-116.
29. Hu G, Chong RA\*, Yang Q\*, Wei Y, Blanco MA, Li F, Reiss M, Au JL-S, Haffty B, and **Kang Y.** (2009) *MTDH* activation by 8q22 genomic gain promotes chemoresistance and metastasis of poor-prognosis breast cancer. *Cancer Cell*, 15(1):9-20. **(Cover Article)**  
*Editorial by:* Kwong LN and Chin L. (2009) *Cancer Cell*, 15:1-2.  
News coverage in Reuters, AFP, CBS, Voice of America, Bloomberg. Rated “*Exceptional*” by *Faculty of 1000*.
30. Lu X and **Kang Y.** (2009) Efficient acquisition of dual metastasis organotropism to bone and lung through stable spontaneous fusion between MDA-MB-231 variants. *Proc. Natl. Acad. Sci.*, 106(23):9385-90.
31. Wei Y, Hu G, and **Kang Y.** (2009) Metadherin unravels a connection between metastasis and chemoresistance. *Cell Cycle*, 8(14): 2132-3.
32. **Kang Y.** (2009) Analysis of cancer stem cell metastasis in xenograft animal models. *Methods Mol. Biol.*, 568:7-19.
33. Steeg PS, Anderson RL, Bar-Eli M, Chambers AF, Eccles SA, Hunter K, Itoh K, **Kang Y.**, Matrisian LM, Sleeman JP, Theodorescu D, Thompson EW, Welch DR. (2009) Preclinical drug development must consider the impact on metastasis. *Clin. Cancer Res.*, 15:4529-30.
34. Korpala M, Yan J, Lu X, Xu S, Lerit D, and **Kang Y.** (2009) Imaging TGF- $\beta$  signaling dynamics and therapeutic response in breast cancer bone metastasis. *Nature Medicine*, 15(8):960-6.

35. Lu X, Wang Q, Hu G, Van Poznak C, Fleischer M, Reiss M, Massagué J, and **Kang Y.** (2009) ADAMTS1 and MMP1 proteolytically engage EGF-like ligands in an osteolytic signaling cascade for bone metastasis. *Genes & Dev.*, 23:1882-1894. **(Cover highlight)**  
*Editorial by:* Guise TA. (2009) *Gens & Dev.*, 23:2117-23.
36. Hu G, **Kang Y\***, Wang XF\*. (2009) From breast to the brain: unraveling the puzzle of metastasis organotropism. *J. Mol. Cell. Biol.* 1:3-5. \* Corresponding authors.
37. Lu X and **Kang Y.** (2009) Chemokine (C-C Motif) ligand 2 engages CCR2+ stromal cells of monocytic origin to promote breast cancer metastasis to lung and bone. *J. Biol. Chem.*, 284:29087-96.
38. Hu G, Wei Y, and **Kang Y.** (2009) The multifaceted role of MTDH/AEG1 in tumor progression. *Clin. Cancer Res.*, 15:5615-20.
39. Lu X, and **Kang Y.** (2009) Cell fusion: a hidden force in cancer progression. *Cancer Res.*, 69:8536-9.
40. Tiede B, Owens LA, Li F, DeCoste C, and **Kang Y.** (2009) A novel mouse model for non-invasive single marker tracking of mammary stem cells *in vivo* reveals stem cell dynamics throughout pregnancy. *PLoS One*, 4(11):e8035.
41. Lu X, and **Kang Y.** (2009) Metalloproteinases and osteoblast EGFR signaling in osteolytic bone metastasis of breast cancer. *Cell Cycle*, 8(23):3804-5.
42. Lu X, Bennet B, Mu E, Rabinowitz J, and **Kang Y.** (2010) Metabolomic profiling reveals a two-step metabolic progression model of metastatic breast cancer. *J. Biol. Chem.*, 285(13):9317-21.
43. Lu X and **Kang Y.** (2010) Epidermal growth factor signaling and bone metastasis. *Br. J. Cancer*, 102(3):457-61.
44. Korpál M and **Kang Y.** (2010) Targeting the transforming growth factor-beta signaling pathway as in metastatic cancer. *Eur J Cancer*, 46(7):1232-40.
45. Lu X, Yan C, Yuan M, Wei Y, Hu G, and **Kang Y.** (2010) *In vivo* dynamics and distinct functions of hypoxia in primary tumor growth and organotropic metastasis of breast cancer. *Cancer Res.*, 70(10):3905-14. **(Cover highlight)**
46. Matveeva O, **Kang Y**, Nechipurenko YD, Nemtsov VA, Spiridonov AN and Shabalina SA. (2010) Optimization of duplex stability and terminal asymmetry for shRNA design. *PLoS One*, 5(4): e10180.
47. Lu X, Lu X and **Kang Y.** (2010) Organ-specific enhancement of metastasis by spontaneous ploidy duplication and cell size enlargement. *Cell Res.*, 20(9):1012-22.
48. Ganapathy V, Ge R, Grazioli A, Xie W, Banach- Petrosky W, **Kang Y**, Lonning S, McPherson J, Yingling JM, Biswas S, Mundy GR, and Reiss M. (2010) Targeting the transforming growth factor- $\beta$  pathway inhibits human basal-like breast cancer metastasis. *Mol. Cancer.*, 9(1):122.
49. Sethi N and **Kang Y.** (2010) Dysregulation of developmental pathways in bone metastasis. *Bone*, 48(1):16-22.

50. Sethi N, Yan Y, Quek D, Schupbach T, **Kang Y**. (2010) Rabconnectin3 is a functional regulator of mammalian Notch signaling. *J. Biol. Chem.*, 285:34757-64.
51. Lu X and **Kang Y**. (2010) Hypoxia and hypoxia-inducible factors (HIFs): master regulators of metastasis. *Clin. Cancer Res.*, 16:5928-35.
52. Zhang X, Tamasi J, Lu X, Zhu J, Chen H, Tian X, Lee T-C, Threadgill DW, Kream BE, **Kang Y**, Partridge NC, and Qin L. (2011) Epidermal growth factor receptor plays an anabolic role in bone metabolism in vivo. *J. Bone Miner. Res.*, 26:1022-34.
53. Tiede B and **Kang Y**. (2011) From milk to malignancy: the role of mammary stem cells in development, pregnancy and breast cancer. *Cell Res.*, 21(2):245-57.
54. Sethi N, Dai X, Winter CG, and **Kang Y**. (2011) Tumor-derived Jagged1 promotes osteolytic bone metastasis of breast cancer by activating stromal Notch signaling. *Cancer Cell*, 19(2):192-205. (**Cover Article**)  
*Editorial by:* Tao J, Erez A, Lee B. *Cancer Cell*, 19(2):192-205. Recommended by *Faculty of 1000*.
55. Blanco MA and Kang Y. (2011) Signaling pathways in breast cancer metastasis — novel insights from functional genomics. *Breast Cancer Res.*, 13:206.
56. Matsushima K, Isomoto H, Yamaguchi N, Inoue N, Machida H, Nakayama T, Hayashi T, Kunizaki M, Hidaka S, Nagayasu T, Nakashima M, Ujifuku K, Mitsutake N, Ohtsuru A, Yamashita S, Korpall M, **Kang Y**, Gregory PA, Goodall GJ, Kohno S, Nakao K. (2011) MiRNA-205 modulates cellular invasion and migration via regulating zinc finger E-box binding homeobox 2 expression in esophageal squamous cell carcinoma cells. *J. Transl. Med.*, 9(1):30.
57. Shan J, Budjiono SJ, Hu G, Yao N, **Kang Y**, Ju Y, and Prud'homme RK. (2011) PEGylated composite nanoparticles containing upconverting phosphors and meso-tetraphenyl porphine (TPP) for photodynamic therapy. *Adv. Funct. Mater.*, 21:2488-2495.
58. Blanco MA, Alečković M, Hua Y, Li T, Wei Y, Xu Z, Cristea I, and **Kang Y**. (2011) Identification of Staphylococcal nuclease domain containing 1 (SND1) as a Metadherin-interacting protein with metastasis-promoting functions. *J. Biol. Chem.*, 286:19982-92.
59. Mercatali L, Ibrahim T, Sacanna E, Flamini E, Scarpi E, Calistri D, Ricci M, Serra P, Ricci R, Zoli W, **Kang Y**, and Amadori D. (2011) Bone metastases detection by circulating biomarkers: OPG and RANK-L. *Int. J. Oncol.*, 9(1):30.
60. Lu X and **Kang Y**. (2011) Cell fusion hypothesis of cancer stem cell. *Adv Exp Med Biol*. 714:129-140.
61. Ibrahim T, Sacanna E, Gaudio M, Mercatali L, Scarpi E, Zoli W, Serra P, Ricci R, Serra L, **Kang Y**, Amadori D. (2011) Role of RANK, RANKL, OPG, and CXCR4 Tissue Markers in Predicting Bone Metastases in Breast Cancer Patients. *Clin. Breast Cancer*. 11(6):369-75.
62. Korpall M, Ell BJ, Buffa FM, Ibrahim T, Blanco MA, Celià-Terrassa T, Mercatali L, Khan Z, Goodarzi H, Hua Y, Wei Y, Hu G, Garcia B, Ragoussis J, Amadori D, Harris AL and **Kang Y**. (2011) Direct

- targeting of Sec23a by miR-200s influences cancer cell secretome and promotes metastatic colonization. *Nature Medicine*, 17:1101–1108. (**Cover Article**)  
*Editorial by:* Thompson EW and Haviv I. (2011) *Nature Medicine*, 17:1048–1049.  
Zaromytidou AI. (2011) *Nature Cell Biol.*, 13:1294.  
McKenna ES. (2011) *Cancer Discovery*, 1:28
63. Sethi N and **Kang Y.** (2011) Unraveling the complexity of metastasis: molecular understanding and targeted therapeutics. *Nature Reviews Cancer*, 11(10):735-748. (Part of the “*The next 10 years*” special series)
64. Lu X, Mu E, Riethdorf S, Yang Q, Wei Y, Yuan M, Yan J, Hua Y, Tiede BJ, Lu X, Reiss M, Haffty BG, Pantel K, Massagué J, and **Kang Y.** (2011) VCAM1 promotes osteolytic expansion of indolent bone micrometastases of breast cancer by engaging  $\alpha 4\beta 1$ -positive osteoclast progenitors. *Cancer Cell*, 20:701-714. (**Featured Article**)  
*Editorial by:* Hynes RO. (2011) *Cancer Cell*, 20:689-690.  
Seton-Rogers S. (2011) *Nature Reviews Cancer*, 12: 920.  
Haas MJ. (2012) *SciBX*, 5(2):1-2.
65. Sethi N and **Kang Y.** (2011) Notch signaling in cancer progression and bone metastasis. *Br. J. Cancer*, 105:735-48.
66. Sethi N and **Kang Y.** (2011) Notch signaling: mediator and therapeutic target of bone metastasis. *IBMS BoneKEY Reports*, 1(3): doi: 10.1038/bonekey.2012.2
67. Koh B and **Kang Y.** (2012) The pro-metastatic role of bone marrow-derived stromal cells: a focus on MSCs and Tregs. *EMBO Report*, 13(5):412-22.
68. Blanco MA, LeRoy A, Khan Z, Alečković M, Zee BM, Garcia BA, and **Kang Y.** (2012) Global secretome analysis identifies novel mediators of bone metastasis. *Cell Res.*, 22:1339-55. (**Cover Article**).  
*Editorial by:* Guo X and Wang XF. (2012) *Cell Res.*, 22:1309-11
69. Celià-Terrassa T, Meca-Cortés Ó, Mateo F, Martínez de Paz I A, Rubio N, Arnal-Estapé A, Ell, BJ, Bermudo R, Díaz A, Guerra-Rebollo, Lozano JJ, Estarás C, Milà J, Vilella R, Paciucci R, García de Herreros A, Gomis RR, **Kang Y**, Blanco J, Fernández PL, and Thomson TM. (2012) Epithelial-mesenchymal transition can suppress major attributes of epithelial tumour-initiating cells. *J. Clin. Invest.*, 122(5):1849-68.
70. Peinado H, Alečković M, Lavotshkin S, Costa da Silva B, Moreno-Bueno G, Hergueta-Redondo M, Williams C, García-Santos G, Ghajar CM, Nitadori-Hoshino A, Hoffman C, Badal K, Garcia BA, Callahan MK, Yuan J, Martins VR, Skog J, Kaplan RN, Brady MS, Wolchok JD, Chapman PB, **Kang Y**, Bromberg J, Lyden D. (2012) Melanoma-derived exosomes educate bone marrow progenitor cells toward a pro-metastatic phenotype. *Nature Medicine*, 18(6):883-91.  
*Editorial by:* Alderton GK. (2012) *Nat Rev Cancer*, 12 (7): 447.  
Somasundaram R and Herlyn M. (2012) *Nat Medicine*, 18 (6): 853-4.  
McKenna ES. (2012) *Cancer Discovery*, 2 (7): 578.
71. Chakrabarti R, Wei Y, Romano R, DeCoste C, **Kang Y**, and Sinha S. (2012) Elf5 regulates mammary gland stem/progenitor cell fate by influencing Notch signaling. *Stem Cells*, 30(7):1496-508.



72. Liang Y, Chong R, Lei R, Wu H, Wei Y, Lu X, Tagkopoulos L, Kung S, Yang Q, Hu G, and **Kang Y** (2012) Transcriptional network analysis identifies BACH1 as a master regulator of breast cancer metastasis to bone. *J. Biol. Chem.*, 287(40):33533-44.
73. Chakrabarti R, Hwang J, Blanco MA, Wei Y, Lukačičin M, Romano R, Smalley K, Liu S, Yang Q, Ibrahim T, Mercatali L, Amadori D, Haffty BG, Sinha S and **Kang Y** (2012) Elf5 inhibits epithelial mesenchymal transition in mammary gland development and breast cancer metastasis by transcriptionally repressing Snail2/Slug. *Nature Cell Bio.*, 14(11):1212-22. (**Cover Article**).  
*Editorial by:* Mathsyaraja H and Ostrowski MC. (2012) *Nature Cell Bio*, 14(11):1122-23.  
McCarthy N. (2012) *Nature Reviews Cancer*, 12: 790.
74. Hitosugi T, Zhou L, Elf S, Fan J, Kang H, Seo J, Shan C, Dai Q, Zhang L, Xie J, Gu T, Jin P, Alečković M, LeRoy G, **Kang Y**, Sudderth JA, DeBerardinis RJ, Luan C-H, Chen GZ, Muller S, Shin DM, Owonikoko TK, Lonial S, Arellano ML, Khoury HJ, Khuri FR, Lee BJ, Ye K, Boggon TJ, Kang S, He C, and Chen J (2012) Phosphoglycerate mutase 1 coordinates glycolysis and biosynthesis to promote tumor growth. *Cancer Cell*, 22:585-600. (**Featured Article**)  
*Editorial by:* Chaneton B and Gottlieb E. (2012) *Cancer Cell*, 22:565-566.
75. Ell B and **Kang Y** (2012) Snapshot: bone metastasis. *Cell*, 151(3):690-690.e1.
76. DeGraff D, Robinson VL, Shah JB, Brandt W, Sonpavde G, **Kang Y**, Liebert M, Wu X-R and Taylor JA (2012) Current pre-clinical models for the advancement of translational bladder cancer research. *Mol. Cancer Ther.*, 12:121-30.
77. Fang W, Wei Y, **Kang Y** and Landweber LF (2012) Detection of a common chimeric transcript between human chromosomes 7 and 16. *Biol Direct*. 7(1):49.
78. Wendt MK, Schiemann BJ, Parvani JG, Lee Y-H, **Kang Y**, and Schiemann WP. (2013) TGF- $\beta$  stimulates Pyk2 expression as part of an epithelial-mesenchymal transition program required for metastatic outgrowth of breast cancer. *Oncogene*, 32(16):2005-15.
79. Smith HA and **Kang Y** (2013) Metastasis-promoting roles of tumor-associated immune cells. *J. Mol. Med.*, 91(4):411-29.
80. Ren G and **Kang Y** (2013) A one-two punch of miR-126/126\* against metastasis. *Nature Cell Bio.*, 15(3):231-3.
81. Hitosugi T, Zhou L, Elf S, Fan J, Elf S, Zhang L, Xie J, Wang Y, Gu T-L, Alečković M, LeRoy G, **Kang Y**, Kang H, Seo J, Shan C, Jin P, Gong W, Lonial S, Arellano ML, Khoury HJ, Chen GZ, Shin DM, Khuri FR, Boggon TJ, Kang S, He C, and Chen J (2013) Y26 phosphorylation of PGAM1 provides a metabolic advantage to tumours by stabilizing the active conformation. *Nature Communications*, 4:1790.
82. **Kang Y** and Pantel K (2013) Tumor cell dissemination: biological insights from animal models and cancer patients. *Cancer Cell*, 23:573-581.
83. Zheng H and **Kang Y** (2013) Multilayer control of the EMT master regulators. *Oncogene*, 33:1755-63.

84. Lee J-Y, Park MK, Park J-H, Lee HJ, Shin DH, **Kang Y**, Lee CH and Kong G (2013) Loss of the polycomb group protein Mel-18 enhances the epithelial–mesenchymal transition by ZEB1 and ZEB2 expression through the downregulation of miR-205 in breast cancer. *Oncogene*, 33:1325-35.
85. Lee ST, Feng M, Wei Y, Wong CH, Qiao Y, Guan P, Li Z, Aau M, Jiang X, Karuturi KM, Tan EY, Hoon D, **Kang Y** and Yu Q (2013) Functional genomic analysis identifies tyrosine protein phosphatase UBASH3B as a crucial node of gene network driving tumor invasion and metastasis. *Proc. Natl. Acad. Sci.*, 110(27):11121-6.
86. Wan L and **Kang Y**. (2013) Pleiotropic roles of AEG-1/MTDH/LYRIC in breast cancer. *Adv. Cancer Res.*, 120:113-34.
87. Leroy G, DiMaggio PA, Chan EY, Zee BM, Blanco MA, Bryant B, Flaniken IZ, Liu S, **Kang Y**, Trojer P, and Garcia BA. (2013) A Quantitative Atlas of Histone Modification Signatures from Human Cancer Cells. *Epigenetics & Chromatin*, 6(1):20.
88. Goode G, Ballard BR, Manning HC, Freeman M, **Kang Y** and Eltom SE (2013) Knockdown of aberrantly upregulated aryl hydrocarbon receptor reduces tumor growth and metastasis of MDA-MB-231 human breast cancer cell line. *Int. J. Cancer*, 133:2769-80.
89. Ell B and **Kang Y** (2013) Transcriptional control of cancer metastasis. *Trends in Cell Biology*, 23L603-611.
90. Alexia C, Carvalho G, Poalas K, Zemirli N, Carvalho G, Zemirli N, Dwyer J, Dubois S, Hatchi E, Cordeiro N, Smith SS, Castanier C, Le Guelte A, Wan L, **Kang Y**, Vazquez A, Gavard J, Arnoult D, and Bidère N (2013) The endoplasmic reticulum acts as a platform for ubiquitylated components of nuclear factor  $\kappa$ B signaling. *Science Signaling*, 6(291):ra79.
91. Smith HA and **Kang Y** (2013) Acute infection induces a metastatic niche: a double menace for cancer patients. *Clin. Cancer Res.* 19(17):4547-9.
92. Ell B, Mercatali L, Ibrahim T, Campbell N, Schwarzenbach H, Pantel K, Amadori D, and **Kang Y**. (2013) Tumor-induced miRNA changes in osteoclast as mediators and biomarkers of osteolytic bone metastasis. *Cancer Cell*. 24:542-56.  
*Editorial by:* Waning DL et al. (2012) *Cancer Cell*, 24: 407-9.  
Ferrarelli LK (2013) *Science Signaling*, 6: ec257.  
Kiberstis, PA (2013) *Science*, 342:671 (2013).
93. Esposito M and **Kang Y**. (2013) Molecular therapeutics for bone metastasis. *Pharmacology & Therapeutics*, S0163-7258(13)00211-8.
94. Wan L, Pantel K, and **Kang Y** (2013) Tumor metastasis: moving new biological insights into the clinic. *Nature Medicine*, 19:1450-1464.
95. Ell B and **Kang Y**. (2013) MicroRNAs as regulators of tumor-associated stromal cells. *Oncotarget*, 4:2165-6.

96. Deng Y, Huang Z, Xu Y, Jin J, Zhuo W, Zhang C, Zhang X, Shen M, Yan X, Wang L, Wang X, **Kang Y**, Si J, and Zhou T (2014) MiR-215 modulates gastric cancer cell proliferation by targeting RB1. *Cancer Lett.* 342:27-35.
97. Fan J, Shan C, Kang H-B, Elf S, Xie J, Tucker M, Gu T-L, Aguiar M, Lonning S, Chen H, Mohammadi M, Britton LP, Garcia BA, Aleckovic M, **Kang Y**, Kaluz S, Devi N, Van Meir E, Hitosugi T,<sup>1</sup>, Seo JH, Lonial S, Gaddh M, Arellano M, Khoury HJ, Khuri FR, Boggon TJ, Kang S, Chen J. (2014) Tyrosine phosphorylation of PDP1 toggles recruitment between ACAT1 and SIRT3 to regulate pyruvate dehydrogenase complex. *Mol. Cell*, 53(4):534-48.
98. Wang Y, Lei R, Zhuang X, Zhang N, Pan H, Li G, Hu J, Pan X, Tao Q, Fu D, Xiao J, **Kang Y**, Yang Q, and Hu G. (2014) DLC1-dependent parathyroid hormone-like inhibition suppresses breast cancer bone metastasis. *J. Clin. Invest.*, 124(4):1646-59.
99. Li W and **Kang Y** (2014) A new lnc in metastasis: long non-coding RNA mediates the pro-metastatic function of TGF- $\beta$ . *Cancer Cell*, 25(5):557-9.
100. Wan L, Lu X, Yuan S, Wei Y, Guo F, Shen M, Yuan M, Chakrabarti R, Hua Y, Smith HA, Blanco MA, Chekmareva M, Wu H, Zheng A, Bronson RT, Haffty BG, Xing Y, and **Kang Y** (2014) MTDH-SND1 interaction is essential for the expansion and activity of tumor-initiating cells in diverse oncogene- and carcinogen-induced mammary tumors. *Cancer Cell*, 26(1):92-105.  
*Editorial by:* Kannan N and Eaves CJ. (2014) *Cell Stem Cell*, 15:118-120.  
Hartsough M. (2014) *Cancer Discovery*, 4(8)
101. Ell B and **Kang Y**. (2014) MicroRNAs as regulators of bone homeostasis and bone metastasis. *BoneKey Reports*, 3:549.
102. Cicchini M, Chakrabarti R, Kongara S, Price S, Nahar R, Lozy F, Hua Zhong H, Vasquez A, **Kang Y** and Karantza V. (2014) Monoallelic *Becn1* loss deregulates the mammary cell hierarchy and promotes parity-associated and WNT1-driven mammary tumorigenesis. *Autophagy*, 10(11): 2036-52.
103. Zheng H, Shen M, Cha Y-L, Li W, Wei Y, Blanco MA, Ren G, Zhou T, Storz P, Wang H-Y, and **Kang Y**. (2014) PKD1 phosphorylation-dependent degradation of SNAIL by SCF-FBXO11 regulates epithelial-mesenchymal transition and metastasis. *Cancer Cell*, 26:358-373.
104. Ell B, Qiu Q, and **Kang Y** (2014) The miRNA-23b/27b/24 cluster promotes breast cancer lung metastasis through inhibition of PSAP. *J. Biol. Chem.*, 289(32):21888-95.
105. Wan L, Hu G, Wei Y, Yuan M, Bronson RT, Yang Q, Siddiqui J, Pienta KJ and **Kang Y**. (2014) Genetic ablation of metadherin inhibits spontaneous prostate cancer progression and metastasis in mice. *Cancer Research*, 74(18):5336-47.
106. Guo F\*, Wan L\*, Zheng A, Stanevich V, Chen H, Wei Y, Satyshur KA, Shen M, Lee W, **Kang Y**<sup>#</sup> and Xing Y<sup>#</sup>. (2014) The structure of MTDH-SND1 complex reveals novel cancer-promoting interactions. *Cell Report*, 8(6):1704-13. <sup>#</sup>Co-corresponding authors.
107. Chakrabarti R, Wei Y, Hwang J, Hang X, Blanco MA, Choudhury A, Tiede B, Romano R-A, DeCoste C, Mercatali L, Ibrahim T, Amadori D, Kannan N, Eaves CJ, Sinha S, and **Kang Y**. (2014)  $\Delta$ Np63

- promotes stem cell activity in mammary gland development and basal-like breast cancer by enhancing Fzd7 expression and Wnt signaling. *Nature Cell Bio*, 16(10):1004-15.
108. Alečković M and **Kang Y**. (2014) Regulation of cancer metastasis by cell-free miRNAs. *Biochim. Biophys. Acta Reviews on Cancer*, 1855(1):24-42.
  109. Mathias RA, Greco TM, Oberstein A, Budayeva HG, Chakrabarti R, **Kang Y**, Shenk S, and Cristea IM. (2014) Sirtuin 4 is a lipoamidase regulating the activity of the pyruvate dehydrogenase complex. *Cell*, 159(7) 1615–1625.
  110. Wong KL, Li W, An Y, Duan Y, **Kang Y**, and Yan Y. (2015)  $\beta$ -Spectrin regulates the Hippo signaling pathway and modulates the basal actin network. *J Biol. Chem.*, 290(10):6397-407.
  111. Chakrabarti and **Kang Y**. (2015) Transplantable mouse tumor models of breast cancer metastasis. *Methods Mol. Biol.*, 1267:367-80.
  112. Zheng H, and **Kang Y**. (2015) Cradle of evil: osteogenic niche for early bone metastasis. *Cancer Cell*, 27:153-155.
  113. Esposito M, and **Kang Y**. (2015) RAI2: linking retinoic acid signaling with metastasis suppression. *Cancer Discovery*, 5(5) 458-460.
  114. Ren G, Esposito M, and **Kang Y**. (2015) Bone metastasis and the metastatic niche. *J Mol Med*. 93(11):1203-12.
  115. Alečković M and **Kang Y**. (2015) Bone marrow stroma-derived miRNAs as regulators, biomarkers and therapeutic targets of bone metastasis. *Bonekey Rep*. 4:671-8.
  116. Hoshino A, Costa-Silva B, Shen T-L, Rodrigues G, Kosaka S, Di Giannatale A, Ceder S, Singh S, Williams C, Ararso Y, Kure EH, Mallya K, Batra SK, Vinagolu RK, Fodstad O, Muller V, Pantel K, Bissell MJ, Ghajar C, Garcia BA, **Kang Y**, Matei I, Peinado H, Bromberg J, and Lyden D. (2015) Tumor exosome integrins determine organotropic metastasis. *Nature*, 527(7578):329-35.
  117. Alečković M and **Kang Y**. (2015) Welcoming treat: astrocyte-derived exosomes induce PTEN suppression to foster brain metastasis. *Cancer Cell*, 28: 554-6.
  118. **Kang Y**. (2016) Imaging TGF $\beta$  signaling in mouse models of cancer metastasis. *Methods Mol. Biol.*, 1344:219-32.
  119. Li W and **Kang Y**. (2016) Probing the fifty shades of EMT in metastasis. *Trends in Cancer*, 2:65-7.
  120. Bednarz-Knoll N, Efstathiou A, Gotzhein F, Wikman H, Mueller V, **Kang Y**, and Klaus Pantel. (2016) Potential involvement of Jagged1 in metastatic progression of human breast carcinomas. *Clin. Chem.*, 62(2):378-86.
  121. Zhao P, Xu Y, Wei Y, Qiu Q, Chew TL, **Kang Y** and Cheng C. (2016) The CD44s splice isoform is a central mediator for invadopodia activity. *J. Cell Science*, 129(7):1355-65.

122. Celià-Terrassa T and **Kang Y.** (2016) Distinctive properties of metastasis initiating cells. *Genes & Development*, 30:892–908.
123. Hu J-Y, Yi W, Deng R, Zhang M-Y, Xu R, Zeng L-S, Long X-R, Zhou X-M, Zheng XF, **Kang Y\***, Wang H-Y\*. (2016) MicroRNA-711 is a prognostic factor for poor overall survival and has an oncogenic role in breast cancer. *Oncology Letters*, 11(3):2155-2163. (\*co-corresponding authors)
124. Li Z and **Kang Y.** (2016) Emerging therapeutic targets in metastatic progression: a focus on breast cancer. *Pharmacology & Therapeutics*, 161:79-96.
125. Ducker GS, Chen L, Morscher RJ, Ghegorovich JM, Esposito M, Teng X, **Kang Y**, Rabinowitz JD. (2016) Reversal of cytosolic one-carbon flux compensates for loss of the mitochondrial folate pathway. *Cell Metabolism*, 24(4):640-641.
126. **Kang Y.** (2016) Dissecting tumor-stromal interactions in breast cancer bone metastasis. *Endocrinology & Metabolism*, 31(2):206-12.
127. Lu W, **Kang Y.** (2016) Cell lineage determinants as regulators of breast cancer metastasis. *Cancer Metastasis Rev.* 35(4):631-644.
128. Smith HA and **Kang Y.** (2017) Determinants of organ-tropic metastasis. *Annu. Rev. Cancer Biol.* 1:21.1–21.21
129. Zhuo W and **Kang Y.** (2017) Lnc-ing ROR1-HER3 and Hippo signaling in metastasis. *Nature Cell Bio.*, 19(2):81-83.
130. Celià-Terrassa T, Liu D, Choudhury A, Hang X, Wei Y, Zamalloa J,2, Alfaro-Aco R, Chakrabarti R, Jiang Y-Z, Koh B, Smith H, DeCoste C, Li J-J, Shao Z-M and **Kang Y.** (2017) Normal and cancer stem cells of the mammary gland evade interferon-induced differentiation and senescence through the miR-199a-LCOR axis. *Nature Cell Bio.*, 19: 711–723.  
*Editorial by:* Gardner A and Ruffell B. (2017) *Nature Cell Bio.*, 19, 597-599.
131. Li Z and **Kang Y.** (2017) Lipid metabolism fuels cancer’s spread. *Cell Metabolism*, 25(2):228-230.
132. Celià-Terrassa T and **Kang Y.** (2017) Mouse genomic screen reveals novel host regulator of metastasis. *Genome Biology.*, 18(1):31.
133. Peinado H, Zhang H, Matei I, Costa-Silva B, Ayuko H, Rodrigues G, Psaila B, Kaplan R, Bromberg J, **Kang Y**, Bissell M, Cox T, Giaccia A, Erler J, Hiratsuka S, and Ghajar C and Lyden D. (2017) Pre-metastatic niches: organ-specific homes for metastases. *Nature Reviews Cancer*, 17(5):302-317.
134. Peng J and **Kang Y.** (2017) The bony side of endothelial cells in prostate cancer. *Developmental Cell*, 41(5):451-452.
135. Shirvani-Dastgerdi E, Winer BY, Celià-Terrassa T, **Kang Y**, Tabernero D, Yagmur E, Rodríguez-Frías F, Gregori J, Luedde T, Trautwein C, Ploss A, Tacke F. (2017) Selection of the highly replicative and partially multidrug resistant rtS78T HBV polymerase mutation during TDF-ETV combination therapy. *J Hepatol.* pii: S0168-8278(17)30198-8. doi: 10.1016/j.jhep.2017.03.027. [Epub ahead of print]

136. Zheng H, Li W, **Kang Y**. (2017) Tumor-Stroma Interactions in Bone Metastasis: Molecular Mechanisms and Therapeutic Implications. *Cold Spring Harb Symp Quant Biol.* 81:151-161.
137. Oslund RC, Su X, Haugbro M, Kee J-M, Esposito E, David Y, Wang B, Ge E, Perlman DH, **Kang Y**, Muir TW and Rabinowitz JD. (2017) Bisphosphoglycerate mutase controls 3-phosphoglycerate concentration and thereby serine pathway flux. *Nature Chemical Biology*, in press.
138. Sánchez-Cid L, Pons M, Lozano JJ, Rubio N, Guerra-Rebollo M, Soriano A, Paris-Coderch L, Segura MF, Fueyo R, Bermudo R, Alonso I, Caparrós X, Rafii A, **Kang Y**, Martínez-Balbás M, Weiss SJ, Blanco J, Muñoz M, Fernández PL\* and Thomson TM\*. (2017) MiR-200 promotes traits of luminal progenitor cells and potentiates the metastatic growth of breast epithelial cells. *Oncotarget*, in press.
139. Alečković M, Wei Y, LeRoy G, Sidoli S, Liu DD, Garcia BA, and **Kang Y**. (2017) Identification of basement membrane protein Nidogen 1 as a lung metastasis promoting factor through secretome analysis. *Genes & Development*, in press.
140. Yang M, Bao W, Zhang X, **Kang Y**, Haffty B, and Zhang L. (2017) Short-term and long-term clinical outcomes of uncommon invasive breast cancers *Histopathology*, in press.

### **Book Chapters**

1. Tiede B and **Kang Y**. (2009) Cancer stem cell and metastasis. In: *Stem Cells and Cancer*. Ed. Dittmar T. (Nova Science Publishers)
2. Owens LA, Tiede B and **Kang Y**. (2009) Cancer stem cells in metastasis: emerging themes and therapeutic implications. In *Cancer Stem Cells*, Ed. Majumder S. (Springer Press).
3. **Kang Y**. (2011) Molecular basis of organ tropisms in cancer metastasis. In *Cancer Metastasis: Biologic Basis and Therapeutics*, Ed. Lyden DC, Welch D. (Cambridge University Press).

### **Professional Activities/Service to the Field**

#### ▪ Services for Professional Society and Conferences

- |              |                                                                                                     |
|--------------|-----------------------------------------------------------------------------------------------------|
| 2016-2018    | President, Metastasis Research Society                                                              |
| 2017-2018    | Chair, Tumor Microenvironment Working Group, AACR                                                   |
| 2014-2016    | President-elect, Metastasis Research Society                                                        |
| 2008-2012    | Board of Directors, Metastasis Research Society                                                     |
| 2016-2018    | Steering Committee of the AACR Tumor Microenvironment (TME) Working Group                           |
| 2013-present | Research Task Force, Metastatic Breast Cancer Alliance                                              |
| 2013-2015    | Board of Directors, Chinese Biological Investigator Society                                         |
| 2016-2018    | Vice President, Chinese Biological Investigator Society                                             |
| 2018-2020    | President, Chinese Biological Investigator Society                                                  |
| 2014-present | Juror, Vilcek Prize for Creative Promise in Biomedical Sciences                                     |
| 2007         | Organizing Committee, Skeletal Complications of Malignancy V                                        |
| 2007         | Bioinformatics/Systems Biology Program Chair, Emerging Information and Technology Conference        |
| 2008         | Co-Organizer, Emerging Information and Technology Conference-Bioinformatics and Biomedical Sciences |

- 2009 Co-Organizer, The 8<sup>th</sup> Chinese Tumor Metastasis Conference, Tianjin, China
- 2009-2010 Education Committee for the 2010 AACR Annual Meeting
- 2010 AACR Tumor Microenvironment Working Group Nominating Committee
- 2011 Section Chair, 13<sup>th</sup> International Symposium of the Society of Chinese Bioscientists in America, Guangzhou, China
- 2011 Scientific Committee, 11<sup>th</sup> Annual Conference of Cancer-Induced Bone Disease
- 2011 Co-Chair, Symposium: Beyond the Breast: Site-Specific Metastasis Research DOD Era of Hope meeting, Orlando, FL
- 2012 2012 AACR Annual Meeting Scientific Program Committee
- 2012 Chair, AACR Annual Meeting Major Symposium: miRNAs and non-coding RNAs
- 2013 2013 AACR Annual Meeting Scientific Program Committee
- 2013 Chair, AACR Annual Meeting Major Symposium: Bone Metastasis
- 2013 Scientific Committee, 13<sup>th</sup> Annual Conference of Cancer-Induced Bone Disease
- 2014 Scientific Committee, 15th Congress of the Metastasis Research Society
- 2015 Co-organizer, CNIO Conference: Metastasis Initiation, Madrid, Spain
- 2015 Chair of organizing committee, 16th Congress of the Metastasis Research Society
- 2015 2016 AACR Annual Meeting Scientific Program Committee, Chairperson of the Metastasis Section of the Tumor Biology Subcommittee
- 2016-2018 AACR Laboratory Research Awards Committee

▪ Editorial Board Member for Scientific Journals:

- 2009 – present Chinese Lung Cancer Journal
- 2010 – present Cell Research, American Journal of Translational Research
- 2013 – present BBA Review on Cancer
- 2011 – 2013 Journal of Biological Chemistry

▪ Ad Hoc Reviewer for Scientific Journals:

- 2004 – present Nature Genetics; Expert Opinion on Therapeutic Targets
- 2005 – present Cancer Research; Molecular and Cellular Biology; Journal of Biological Chemistry; Oncogene; Expert Review of Molecular Diagnostics; Intl. J. Cancer; Molecular Cancer Therapeutics; Clinical Cancer Research; Cancer Epidemiology, Biomarkers and Prevention; Women's Health
- 2006 – present Journal of Cell Science; PNAS
- 2007 – present Nature, Nature Medicine, PLoS Genetics, PLoS ONE, Neoplasia, Journal of Cell Biology, Cell Research, Molecular Cancer Therapeutics, Cellular and Molecular Medicine
- 2008 – present Cancer Treatment Reviews, EMBO Journal, EMBO Report, EMBO Molecular Medicine, Cancer Cell, Oncogene, Genes & Development
- 2010 – present Cell, Clinical and Experimental Metastasis
- 2012 – present Science, Nature Cell Biology, Cell Stem Cell
- 2013 – present Cancer Discovery

▪ Standing Member of Grant Review Committees:

- 2010-2014 National Institute of Health, Tumor Microenvironment (TME) Study Section
- 2010-2014 American Cancer Society, Tumor Biology and Genomics (TBG) Study Section
- 2013-2016 Pershing Square Sohn Cancer Research Alliance Scientific Review Council

▪ Ad Hoc Grant Reviewer for:

US National (Federal):

National Institute of Health, Tumor Microenvironment (TME) and Oncology: Basic and Translational (OBT1) Study Sections (2009)

Cellular and Tissue P01 Special Emphasis Panel (2011)

Oncology 1: Basic Translational IRG OBT Special Review (2011)

NCI Cell and Cancer Biology Branch Site Visit (2012)

Department of Defense Breast Cancer Program (2006-present)

US National (Private):

Susan G. Komen Foundation (2006, 2010, 2011, 2012, 2014, 2015)

American Cancer Society (2008- 2009)

Flight Attendants Medical Research Institute (2007, 2008, 2011)

Brest Cancer Alliance (2013-present)

Landon Foundation-AACR Innovator Award for Tumor Microenvironment Research (2015)

AACR-Triple Negative Breast Cancer Foundation Career Development Award (2015)

State:

Florida Department of Health (2010-present)

Pennsylvania State Cancer Research Grant (2006-present)

New York State Stem Cell Research (2008, 2009)

New York State Department of Health (2010)

International:

Austrian Science Fund (2008)

The Medical Research Council (United Kingdoms) (2004)

Cancer Research UK (2007, 2009, 2010, 2015)

National Natural Science Foundation of China (2009)

Italian Association of Cancer Research, AIRC (2010-2016)

Italian Ministry of Health (2009-2012)

Agency for Science, Technology and Research's (A\*STAR) Biomedical Research Council (BMRC) in Singapore (2007, 2009)

Research Grants Council of Hong Kong, China (2010-2015)

ANR, French Research Funding Agency, France (2011)

Kuwait Foundation for the Advancement of Sciences (2012)

Foundation for Polish Science (2012, 2013)

Portuguese Foundation for Science and Technology (2012)

Qatar National Research fund (2013-2016)

National Research Foundation of Luxemburg (2013)

Chilean National Commission for Scientific and Technological Research, Chile (2014)

King Abdullah International Medical Research Center, Saudi Arabia (2014)

National Medical Research Council of Singapore (2015)

Belgian Foundation against Cancer (2016)

**Invited Lectures**

1. AIMM-ASBMR John Haddad Young Investigators Meeting, Snowmass, Colorado (3/30/2004)
2. Hermelin Brain Tumor Center Symposium on Metastatic Disease, Henry Ford Hospital, Detroit, Michigan (5/7/2004)
3. 34th International Sun Valley Workshop on Skeletal Tissue Biology, Sun Valley, Idaho (8/1/2004)



4. 10th International Congress of Metastasis Research Society, Genoa, Italy (9/17/2004)
5. Fred Hutchinson Cancer Center, Seattle, Washington (11/23/2004)
6. Biomolecular Technologies: Discovery to Hypothesis, Savannah, Georgia (02/06/2005)
7. Alfred I. Dupont Hospital, Wilmington, Delaware (03/21/2005)
8. Skeletal Complications of Malignancy IV, Bethesda, Maryland (04/30/2005)
9. EuroCancer 2005, Paris, France (06/22/2005)
10. The Cancer Institute of New Jersey, New Brunswick, New Jersey (10/18/2005)
11. Society of Chinese Biological Investigators Annual Bi-Meeting, Boulder, Colorado (12/19/2005)
12. BRECOSM Breast Cancer and Metastasis Meeting, Paris, France (6/22/2006)
13. 11<sup>th</sup> International Congress of Metastasis Research Society, Tokushima, Japan (9/3/2006)
14. National Cancer Center, Tokyo, Japan (9/7/2006)
15. University of Massachusetts Medical Center, Worcester, Massachusetts (10/25/2006)
16. Duke University, Program of Cell and Molecular Biology, Durham, North Carolina (11/09/2006)
17. VI International Meeting on Cancer Induced Bone Disease, San Antonio, Texas (12/10/2006)
18. Rutgers University, Department of Genetics, Piscataway, New Jersey (2/5/2007)
19. Princeton Innovation Forum, Princeton, New Jersey (2/27/2007)
20. Medical College of Wisconsin, Milwaukee, Wisconsin (4/5/2007)
21. Villanova University, Department of Biology, Philadelphia, Pennsylvania (4/12/2007)
22. BioMaPS Summer School on cancer biology and bioinformatics, Rutgers University, Piscataway, New Jersey (6/14/2007)
23. Merck Research Laboratories, Boston, MA (7/11/2007)
24. Gordon Research Conference, Biddeford, Maine (7/15/2007)
25. Society of Chinese Biological Investigators Bi-Annual Meeting, Beijing, China (7/24/2007)
26. Peking University School of Medicine, Beijing, China (7/25/2007)
27. Fudan University, Shanghai, China (7/30/2007)
28. Zhejiang University School of Medicine, Hangzhou, China (7/31/2007)
29. Emerging Information and Technology Conference, Princeton, New Jersey (8/10/2007)
30. Skeletal Complications of Malignancy V, Philadelphia, Pennsylvania (10/25/2007)
31. Harry and Elsa Jiler — American Cancer Society Professors Meeting, Naples, Florida (11/9/2007)
32. University of Alabama, Department of Pathology, Birmingham, Alabama (1/10/2008)
33. 19<sup>th</sup> Annual Cancer Progression Conference, New York, NY (3/12/2008)
34. International Conference on Invasion and Metastasis, Max Delbrück Center for Molecular Medicine (MDC), Berlin, Germany (3/27/2008)
35. The 2008 Governor's Conference on Effective Partnering in Cancer Research "Stem Cells and Cancer", Princeton, NJ (4/10/2008)
36. Vanderbilt University Ingram Comprehensive Cancer Center, Nashville, TN (6/10/2008)
37. Era of Hope 2008 Conference, Baltimore, MD (6/27/2008)
38. Molecular Therapeutics of Cancer Research Conference, Princeton, NJ (8/13/2008)
39. Genentech, South San Francisco, CA (9/4/2008)
40. University of Pennsylvania, Gastroenterology Program, Philadelphia, PA (9/18/2008)
41. Molecular Biology and Therapeutics in Musculoskeletal Oncology Research Symposium, Salt Lake City, Utah (9/27/2008)
42. Bristol-Myers Squibb, Princeton, NJ (10/27/2008)
43. Meharry Medical College, Department of Cancer Biology, Nashville, TN (11/10/2008)
44. Tsinghua University, Beijing, China (11/28/2008)
45. SAPA Pharmaceutical Symposium, Princeton, NJ (3/14/2009)
46. St. Vincent's Institute & University of Melbourne, Melbourne, Australia (3/24/2009)
47. VIII International Meeting on Cancer Induced Bone Disease, Sydney, Australia (3/25/2009)

48. Department of Computer Sciences, Princeton University, Princeton, NJ (4/23/2009)
49. 2009 SCBA International Symposium, Academia Sinica, Taipei (6/16/2009)
50. Sun Yat-sen University School of Medicine, Guangzhou, China (6/19/2009)
51. Shanghai Jiao Tong University, Shanghai, China (7/1/2009)
52. Fudan University, Shanghai, China (7/2/2009)
53. The 8<sup>th</sup> Chinese Tumor Metastasis Conference, Tianjin, China (7/4/2009)
54. Cancer Institute of New Jersey, New Brunswick, NJ (7/14/2009)
55. Vanderbilt University Ingram Comprehensive Cancer Center, Nashville, TN (8/18/2009)
56. European Metastasis Conference, Sesimbra, Portugal (9/6/2009)
57. Duke University Medical Center, Distinguished Alumni Lecture, Molecular Genetics & Microbiology, Durham, NC (10/1/2009)
58. AACR Advance in Breast Cancer Research, San Diego, CA (10/14/2009)
59. IX International Meeting on Cancer Induced Bone Disease, Arlington, VA (10/29/2009)
60. Memorial Sloan-Kettering Cancer Center, Cancer Biology and Genetics, New York, NY (11/6/2009)
61. Cancer Institute of New Jersey, The Cancer Center Grand Rounds, New Brunswick, NJ (11/11/2009)
62. Fudan University School of Medicine, Shanghai, China (11/16/2009)
63. Shanghai Institute of Health Sciences, Chinese Academy of Sciences, Shanghai, China (11/17/2009)
64. Washington University, Cellular Proliferation Program at the Siteman Cancer Center and the Molecular Imaging Center, St. Louis, MO (12/16/2009)
65. University of Colorado Cancer Center, Denver, CO (2/10/2010)
66. Emory University Winship Cancer Institute, Atlanta, GA (3/19/2010)
67. Paterson Institute for Cancer Research and Manchester Breast Centre, University of Manchester, United Kingdom (3/23/2010)
68. 101<sup>st</sup> Annual Meeting of American Association for Cancer Research, Washington, DC (4/18/2010)
69. A. C. Camargo Cancer Hospital and Antonio Prudente Cancer Research Center, São Paulo, Brazil (4/30/2010)
70. Banbury Tumor Microenvironment and Metastasis Conference, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY (5/7/2010)
71. Rolanette and Berdon Lawrence Bone Disease Program, Baylor College of Medicine and M.D. Anderson Cancer Center, Houston, TX (5/28/2010)
72. 19th Annual Meeting of Japanese Association of Metastasis Research, Kanazawa, Japan (6/16/2010)
73. Xiamen University, Xiamen, China (6/22/2010)
74. Zhejiang University, Zhejiang, China (6/25/2010)
75. 2010 Bladder Cancer Think Tank Meeting, Traverse City, MI (8/6/2010)
76. Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA (8/24/2010)
77. McArdle Cancer Research Seminar Series, University of Wisconsin at Madison (9/8/2010)
78. Joint Metastasis Research Society-AACR Conference, Philadelphia, PA (9/13/2010)
79. Tianjin University General Hospital, Tianjin, China (10/19/2010)
80. Ohdang Plenary Lecture , 2010 Annual Convention of the Pharmaceutical Society of Korea, Cheongju, Republic of Korea (10/21/2010)
81. Korea Advanced Institute of Science and Technology, Dajeon, Republic of Korea (10/22/2010)
82. NSF workshop “Physics of Metastasis”, Washington DC (11/1/2010)
83. Department of Biochemistry, State University of New York at Buffalo and Roswell Park Cancer Center, Buffalo, NY (11/9/2010)

84. Breast Cancer Program, Karmanos Cancer Institute, Wayne State University, Detroit, MI (11/18/2010)
85. Amgen Inc, Thousand Oaks, CA (12/10/2010)
86. International symposium: "Breast cancer: today and tomorrow a multidisciplinary approach", Forli, Italy (12/16/2010)
87. Champalimaud Cancer Centre Symposium, Champalimaud Foundation, Lisbon, Portugal (1/14/2011)
88. Department of Physiology, Tufts University School of Medicine, Boston, MA (3/8/2011)
89. 12<sup>th</sup> World Conference, Fudan University Alumni Association (5/7/2011)
90. Mary Babb Randolph Cancer Center, West Virginia University, Morgantown, WV (5/11/2011)
91. Department of Hematology and Oncology, University of Freiburg, Germany (5/20/2011)
92. The Gordon Research Seminar (GRS) and Gordon Research Conference (GRC) on "Bones & Teeth", Les Diablerets, Switzerland (6/18/2011)
93. Champalimaud-TuMic Metastasis Research Meeting, Lisbon, Portugal (6/26/2011)
94. Bristol-Myers Squibb, Princeton, NJ (7/13/2011)
95. 13<sup>th</sup> International Symposium of the Society of Chinese Bioscientists in America, Guangzhou, China (7/28/2011)
96. Sun Yat-Sen University Cancer Center, Guangzhou, China (7/29/2011)
97. The 9<sup>th</sup> Biannual Conference of Chinese Biological Investigator Society, ZhangJiaJie, China (7/31/2011)
98. The 6<sup>th</sup> DOD Era of Hope Meeting, Orland, Florida (8/5/2011)
99. 2011 FASEB meeting on TGF- $\beta$  Signaling in Development and Disease, Lucca, Italy (8/21/2011)
100. 3rd International Tumor Progression and Metastasis Kloster Seeon Meeting, Seeon, Germany (9/19/2011)
101. Department of Cellular and Structural Biology, University of Texas Health Science Center, San Antonio, TX (10/4/2011)
102. Genome Institute of Singapore, Singapore (10/11/2011)
103. Zhejiang University School of Medicine, Hangzhou, China (10/19/2011)
104. Shanghai Jiao Tong University School of Medicine, Shanghai, China (10/21/2011)
105. Fox Chase Cancer Center, Philadelphia, PA (10/29/2011)
106. 1st NIBB - Princeton Symposium "Proteomics, Metabolomics, and Beyond", Okazaki, Japan (11/2/2011)
107. The 5th Japan & US Collaboration Conference in Gastroenterology, Tokyo, Japan (11/10/2011)
108. Department of Developmental Biology and Cancer Research, Hadassah School of Medicine, Hebrew University, Jerusalem, Israel (11/17/2011)
109. Keynote lecture at the Annual Retreat of the Proteases and Cancer Program, The Barbara Ann Karmanos Cancer Institute, Detroit, MI (12/1/2011)
110. 11th Annual Conference of Cancer-Induced Bone Disease, Chicago, IL (12/2/2011)
111. Department of Oncological Sciences, Mount Sinai School of Medicine, New York, NY (1/10/2012)
112. Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands (1/26/2012)
113. University Medical Center Hamburg-Eppendorf, Hamburg, Germany (1/28/2012)
114. Metastasis Research Center, M.D. Anderson Cancer Center, Houston, TX (2/7/2012)
115. Department of Pediatrics, M.D. Anderson Cancer Center, Houston, TX (3/13/2012)
116. Immunology and Cancer Biology Seminar Series, Cedars-Sinai Medical Center, Los Angeles (3/23/2012)
117. Robert H. Lurie AACR Scholars Symposium, Northwestern University, Chicago, IL (3/30/2012)
118. Major Symposium on miRNAs in Cancer Progression, 103<sup>rd</sup> AACR Annual Meeting, Chicago, IL (4/2/2012)

119. Award Lecture, 103<sup>rd</sup> AACR Annual Meeting, Chicago, IL (4/3/2012)
120. SAPA Symposium on Translational Medicine, Princeton, NJ (4/14/2012)
121. National Breast Cancer Coalition's (NBCC) Annual Advocate Summit, Arlington, VA (5/6/2012)
122. National Cancer Institute-Frederick, Frederick, MD (5/7/2012)
123. 2nd International Conference: Translational Research in Oncology, Forli, Italy (5/9/2012)
124. Hepatic metastasis symposium, Champalimaud Center, Lisbon, Portugal (5/12/2012)
125. BeiGene Biotech, Beijing, China (5/21/2012)
126. National Institute of Biological Sciences, Beijing, China (5/22/2012)
127. Tsinghua University, Beijing, China (5/22/2012)
128. Ohio State University Comprehensive Cancer Center, Columbus, Ohio (6/6/2012)
129. Fourth International Conference on Osteoimmunology: Interactions of the Immune and Skeletal Systems, Corfu, Greece (6/18/2012)
130. Molecular Cancer Therapeutics Conference, Princeton, NJ (7/16/2012)
131. Friedrich Miescher-Institute for Biomedical Research, Basel, Switzerland (7/25/2012)
132. Gordon Conference on Notch Signaling in Development, Regeneration & Disease, Lewiston, ME (8/12/2012)
133. Zhejiang University, Hangzhou, China (8/26/2012)
134. The 14th International Biennial Congress of the Metastasis Research Society, Brisbane, Australia (9/4/2012)
135. Genomic Instability and Tumor Progression Program, Cancer Institute of New Jersey, New Brunswick, NJ (9/18/2012)
136. 1<sup>st</sup> ACTC "Advances in Circulating Tumor Cells" meeting, Athens, Greece (9/26/2012)
137. Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA (10/2/2012)
138. The Herrenhausen Symposium on Metastasis, Seeon, Germany (10/10/2012)
139. Korean Society of Molecular and Cellular Biology 2012 meeting, Seoul, Korea (10/12/2012)
140. Korea Advanced Institute of Science and Technology, Dajeon, Korea (10/12/2012)
141. President's Research Seminar Series, Memorial Sloan-Kettering Cancer Center, New York (10/17/2012)
142. World Oncology Forum, Lugano, Switzerland (10/26/2012)
143. 3rd International Conference on Cellular Dynamics & Chemical Biology, Hefei, China (11/15/2012)
144. Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China (11/20/2012)
145. 2012 CTSC-AACR San Antonio Breast Cancer Symposium, San Antonio, TX (12/5/2012)
146. Salvador E. Luria Lecture, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (12/11/2012)
147. Department of Cell Biology, Albert Einstein College of Medicine, Bronx, NY (12/19/2012)
148. Department of Chemical Biology and Therapeutics, St. Jude Children's Research Hospital, Memphis, TN (1/10/2013)
149. Pathology Grand Round, Yale University School of Medicine, New Haven, CT (1/17/2013)
150. AACR Special Conference on Tumor Invasion and Metastasis San Diego, CA (1/22/2013)
151. Peggy and Charles Stephenson Cancer Center, University of Oklahoma Health Science Center, Oklahoma City, OK (1/25/2013)
152. Markey Cancer Center, University of Kentucky, Lexington, KY (1/30/2013)
153. Department of Biochemistry and Cancer Biology, University of Toledo College of Medicine, Toledo, OH (2/7/2013)
154. Pathway in Development and Cancer Conference, Freiburg, Germany (2/20/2013)

155. Karolinska Institute Cancer Center, Stockholm, Sweden (2/22/2013)
156. AACR-SNM Joint Conference on Molecular Imaging in Cancer Research, San Diego, CA (3/2/2013)
157. Institut de Recherches Cliniques de Montreal, Montreal, Canada (3/4/2013)
158. Zhejiang University School of Medicine, Hangzhou, China (3/9/2013)
159. AACR Annual Meeting, Washington, DC (4/7/2013)
160. Genesis Biotechnology Group, Hamilton, NJ (4/17/2013)
161. Department of Biological Sciences, University of Notre Dame, South Ben, IN (4/23/2013)
162. 4th Annual Origins of Cancer Symposium, Van Andel Research Institute, Grand Rapids, MI (05/03/2013)
163. Duke-NUS Graduate Medical School, Singapore (5/21/2013)
164. The Humphrey Oei Lecture, National Cancer Center, Singapore, Singapore (5/23/013)
165. National Breast Cancer Coalition Artemis Project on Tumor Dormancy, Knoxville, TN (6/11/2013)
166. Herbert Irving Comprehensive Cancer Center (HICCC) Annual Symposium on Advances in Cancer Research: Tumor Microenvironment, Columbia University, New York, NY (6/12/2013)
167. NCI Tumor Microenvironment Conference: Stromal Cells and Extracellular Matrix in the Tumor Microenvironment, Cambridge, MA (6/20/2013)
168. Zhejiang University School of Medicine, Hangzhou, China (7/19/2013)
169. 14<sup>th</sup> International Symposium of the Society of Chinese Bioscientists in America, Xi'an, China (7/21/2013)
170. Amgen, Thousand Oaks, CA (8/13/2013)
171. City of Hope Beckman Research Institute and Cancer Center, Duarte, CA (8/19/2013)
172. Keynote Lecture, Breast Cancer Research and Education Program Retreat, Lester and Sue Smith Breast Center, Baylor College of Medicine, Houston, TX (8/29/2013)
173. AACR Conference: Frontiers in Basic Cancer Research, Washington, DC (9/21/2013)
174. INSERM, University of Lyon, Lyon, France (9/24/2013)
175. 9th International Symposium on Minimal Residual Cancer, Paris, France (9/25/2013)
176. Department of Pathology, University of California, San Diego, CA (10/3/2013)
177. Keynote lecture, AACR Special Conference on Advances in Breast Cancer Research, San Diego, CA (10/3/2013)
178. 4th Global Breast Cancer Conference, Seoul, South Korea (10/11/2013)
179. Keynote lecture, International Breast Cancer Conference, Kunming, China (10/13/2013)
180. Korean Advanced Institute of Science and Technology, Dajeon, Korea (10/15/2013)
181. Irving Cancer Research Center, Columbia University, New York, NY (11/4/2013)
182. Cancer Induced Bone Diseases 2013, Miami, FL (11/8/2013)
183. Fudan University Shanghai Cancer Center, Shanghai, China (11/11/2013)
184. Sun Yat-Sen University Cancer Center, Guangzhou, China (11/12/2013)
185. Center for Cancer Research, The University of Hong Kong, Hong Kong, China (11/13/2013)
186. 2<sup>nd</sup> Hong Kong International Cancer Congress, Hong Kong, China (11/14/2013)
187. Keynote lecture, 16th Annual Meeting of Japanese Cancer-induced Bone Disease, Tokyo, Japan (11/15/2013)
188. University of Science and Technology of China, Hefei, China (11/18/2013)
189. Tongji University School of Medicine, Shanghai, China (11/20/2013)
190. University of Pittsburgh Cancer Institute, Pittsburgh, PA (12/3/2013)
191. Center for Cancer Research Grand Rounds, National Cancer Institute, Bethesda, MD (12/13/2013)
192. The Abramson Family Cancer Research Institute and Department of Hematology/Oncology, University of Pennsylvania, Philadelphia, PA (12/17/2013)

193. Department of Experimental Radiation Oncology, MD Anderson Cancer Center, Houston, TX (12/19/2013)
194. Chinese Biological Investigators Society 10<sup>th</sup> Biennial Conference, Cancún, Mexico (12/24/2013)
195. Breast Cancer Program, Vanderbilt-Ingram Cancer Center, Vanderbilt University, Nashville, TN (1/7/2014)
196. Department of Pharmacology, UT Southwestern Medical Center, Dallas, TX (1/16/2014)
197. ISREC Symposium "Metastatic colonization: micro-environments, mechanisms, and therapeutic targeting", Valais, Switzerland (1/25/2014)
198. Bones and Teeth Gordon Research Conference, Galveston, TX (1/27/2014)
199. Kaufman Lectureship, Division of Gastroenterology, University of Pennsylvania, Philadelphia, PA (2/27/2014)
200. Norris Cotton Cancer Center, Dartmouth College, Lebanon, NH (3/18/2014)
201. Joseph and Mable Meites Lectureship, Department of Physiology, Michigan State University, East Lansing, MI (3/20/2014)
202. Meet-the-Expert Session, AACR Annual Meeting, San Diego, CA (4/6/2014)
203. Siteman Cancer Center, Washington University, St. Louis, MO (4/22/2014)
204. Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX (4/9/2014)
205. 3<sup>rd</sup> International Conference: Translational Research in Oncology, Forlì, Italy (5/8/2014)
206. 2014 Annual Congress of the European Calcified Tissue Society, Prague, Czech Republic (5/18/2014)
207. NCI Tumor Microenvironment Conference, New York, NY (6/12/2014)
208. Keynote speech, 5<sup>th</sup> Annual NCI Tumor Microenvironment Network Junior Investigators Meeting, Bethesda, MD
209. The 15<sup>th</sup> International Biennial Congress of the Metastasis Research Society, Heidelberg, Germany (6/30/2014)
210. The 3<sup>rd</sup> International Symposium of Frontier in Cancer Research, Chinese Academy of Engineering, Dalian, China (7/4/2014)
211. The 37<sup>th</sup> Naito Conference on "Bioimaging—a paradigm shift for the life sciences", Hokkaido, Japan (7/16/2014)
212. Gordon Research Conference on Rare Cells in Circulation, with a focus on Circulating Tumor Cells, South Hadley, MA (8/5/2014)
213. Cold Spring Harbor Meeting on Mechanisms and Models of Cancer, Cold Spring Harbor, NY (8/13/2014)
214. Sun Yat-Sen University Cancer Center, Guangzhou, China (9/3/2014)
215. Center for Cancer Research, The University of Hong Kong, Hong Kong, China (9/4/2014)
216. Division of Life Sciences, Hong Kong University of Science and Technology, Hong Kong, China (9/18/2014)
217. New Concepts in Cancer Diagnosis and Treatment, The People's Hospital of Guangxi Province, Nanning, Guangxi, China (9/19/2014)
218. 3<sup>rd</sup> International Conference on Tumor Microenvironment and Cellular Stress: Signaling, Metabolism, Imaging and Therapeutic Targets, Mykonos, Greece (9/22/2014)
219. 2<sup>nd</sup> International Symposium on Advances in Circulating Tumor Cells (ACTC): From Basic Research to Clinical Practice", Crete, Greece (10/11/2014)
220. IMPACT Symposium - Understanding Biology, Improving Outcomes, Oslo, Norway (10/16/2014)
221. 15<sup>th</sup> Conference of the International Union of Biochemistry and Molecular Biology, Taipei, Taiwan (10/22/2014)
222. Zhejiang University Cancer Center, Hangzhou, China (10/24/2014)

223. 13th Chinese Breast Cancer Conference & 9th Shanghai International Breast Cancer Symposium, Shanghai, China (10/25/2014)
224. Forbeck Forum on Invasion and Metastasis, Hilton Head, SC (11/7/2014)
225. Zhejiang Province Cancer Hospital and Research Institute, Hangzhou, China (11/13/2014)
226. The 4th International Conference and the 1st ASCB Local Meeting on Cellular Dynamics and Chemical Biology, Hefei, China (11/14/2014)
227. Distinguished Lecture Series, Department of Cancer Biology, Wake Forest University School of Medicine, Winston-Salem, NC (12/2/2014)
228. AACR Outstanding Investigator Award Lecture, CTRC-AACR San Antonio Breast Cancer Symposium, San Antonio, TX (12/11/2014)
229. Keynote, Governor's STEM scholars conference on academia & STEM, Piscataway, NJ (12/13/2014)
230. Holden Comprehensive Cancer Center and Department of Pharmacology, University of Iowa, Iowa City, IA (1/20/2015)
231. AACR-SNMMI Joint Conference on State-of-the-Art Molecular Imaging in Cancer Biology and Therapy, San Diego, CA (2/14/2015)
232. SAPA Translational Oncology Symposium, Princeton, NJ (3/7/2015)
233. Tsinghua University-Princeton University Joint Symposium in Biomedical Research, Tsinghua University, Beijing, China (3/17/2015)
234. Tsinghua University-Zhejiang University Joint Symposium in Biomedical Research, Zhejiang University, Hangzhou, China (3/19/2015)
235. The 3rd Beijing International Symposium on Tumor Microenvironment, Beijing, China (5/16/2017)
236. The Second FHS Annual Symposium for Biomedical Research, University of Macau, China (7/10/2015)
237. Croucher Summer Course in Cancer Biology, The University of Hong Kong, Hong Kong, China (8/14/2015)
238. Department of Experimental Therapeutics, M.D. Anderson Cancer Center, Houston, TX (9/16/2015)
239. Metastatic Breast Cancer Conference, Houston, TX (9/18/2015)
240. CNIO Conference: Metastasis Initiation: Mechanistic Insight and Therapeutic Opportunities, Madrid, Spain (9/28/2015)
241. British Association for Cancer Research Special Conference on Breast Cancer, Newcastle, United Kingdom (10/8/2015)
242. Greg Mundy Memorial Bone and Cancer Symposium, American Society of Bone and Mineral Research Annual Meeting, Seattle, WA (10/11/2015)
243. Keynote, Annual Retreat of Purdue University Center for Cancer Research, West Lafayette, IN (10/14/2015)
244. The Fourth Breast Cancer Stem Cell Symposium, Suzhou, China (10/16/2015)
245. 14th Chinese Breast Cancer Conference & 10th Shanghai International Breast Cancer Symposium, Shanghai, China (10/23/2015)
246. Keio University, Tokyo, Japan (11/12/2015).
247. 4th Cancer Stem Cell Symposium, Fukuoka, Japan (11/14/2015).
248. Shanghai Institute of Health Sciences, Shanghai, China (11/20/2015)
249. Department of Pharmaceutical Sciences, Texas Tech University Health Sciences Center, Amarillo, TX (12/2/2015)
250. Hollings Cancer Center, Medical University of South Carolina, Charleston, SC (1/22/2016)
251. SickKids Research Institute, Toronto, Canada (1/26/2016)
252. 10th International Symposium on Minimal Residual Cancer, Hamburg, Germany (3/19/2016)

253. Molecular and Cellular Basis of Disease: Cancer Metastasis Symposium, American Society for Investigative Pathology, San Diego, CA (4/2/2016)
254. Department of Pharmacology and Penn State Hershey Cancer Institute, The Pennsylvania State University College of Medicine, Hershey, PA (4/13/2016)
255. 2016 Seoul International Congress of Endocrinology and Metabolism (SICEM) & the 35th Annual Scientific Meeting of the Korean Endocrine Society (KES) (4/30/2016)
256. Shanghai Cancer Institute, Shanghai, China (5/4/2016)
257. Danny Thomas Lectureship, St. Jude Children's Research Hospital, Memphis, TN (5/6/2016)
258. 81st Cold Spring Harbor Laboratory Symposium on Quantitative Biology: Targeting Cancer (6/2/2016)
259. Cancer Center Grand Round, University of Arkansas for Medical Sciences, Little Rock, Arkansas (6/8/2016)
260. Montreal International Symposium on Angiogenesis and Metastasis, Montreal, Canada (6/16/2016)
261. 41st Naito Conference, Cancer Heterogeneity and Plasticity: Relevance to therapeutic resistance, Hokkaido, Japan (7/6/2016)
262. Breast Cancer Summit, 2nd Affiliated Hospital of Zhejiang University, Hanzhou, China (7/30/2016)
263. Champalimaud Foundation, Lisbon, Portugal (9/1/2016)
264. Cancer Institute of New Jersey, New Brunswick, NJ (9/7/2016)
265. The 16th Biennial Conference of the Metastasis Research Society, Chengdu, China (9/16/2016)
266. Baylor College of Medicine Cancer Center, Houston, TX (10/6/2016)
267. Cancer Evolution: Mechanisms of Vulnerability and Resistance Symposium, M.D. Anderson Cancer Center, Houston (10/7/2016)
268. The 5<sup>th</sup> Breast Cancer Stem Cell Symposium, Shanghai, China (10/10/2016)
269. School of Life Sciences, East China Normal University, Shanghai, China (10/10/2016)
270. Cancer and Immunity Symposium, Shanghai Institute of Health Sciences, Shanghai, China (10/11/2016)
271. 11th Shanghai International Breast Cancer Symposium, Shanghai, China (10/22/2016)
272. International Conference on Epithelial-Mesenchymal Transition and Cancer, Hangzhou, China (10/25/2016)
273. Cincinnati Cancer Symposium on Breast Cancer, University of Cincinnati College of Medicine (11/3/2016)
274. 4th International Conference: Translational Research in Oncology, Forlì, Italy (11/8/2016)
275. Drexel University College of Medicine, Philadelphia, PA (11/17/2016)
276. Cancer Research Symposium, National Health Research Institute, Taipei (11/28/2016)
277. Institute of Molecular and Genomic Medicine (IMG), Taipei (11/29/2016)
278. Distinguished Speakers Seminar Series, Fred Hutchinson Cancer Center, Seattle, WA (12/14/2016)
279. Thomas Jefferson University, Philadelphia, PA (1/11/2017)
280. 13th Charles-Rodolphe Brupbacher Symposium, Zurich, Switzerland (2/1/2017)
281. Tulane University Cancer Center, New Orleans, LA (3/9/2017)
282. 2017 Harvard Chinese Life Science Symposium, Boston, MA (4/29/2017)
283. Distinguished Lecture, Fox Chase Cancer Center, Philadelphia, PA (5/4/2017)
284. Ludwig Center for Molecular Oncology and the Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA (5/8/2017)
285. Fudan University School of Life Sciences, Shanghai, China (6/2/2017)
286. Haematopoiesis and Immunology Conference, Suzdal, Russia (6/5/2017)
287. MPM-Astellas Scientific Colloquium, Cambridge, MA (6/26/2017)
288. Sun Yet-San University School of Life Science, Guangzhou, China (6/29/2017)



289. Sun Yet-San University Cancer Center, Guangzhou, China (6/30/2017)
290. Seventh International Workshop on Cancer Systems Biology, Zhuhai, China (7/1/2017)
291. Fudan University Shanghai Medical School, Shanghai, China (7/5/2017)
292. New York Cancer Genome Research Network, New York, NY (9/5/2017)
293. Case Western Reserve University Cancer Center, Cleveland, OH (9/8/2017)
294. University of Virginia Cancer Center, Charlottesville, VA (9/15/2017)
295. 3<sup>rd</sup> ACTC “Advances in Circulating Tumor Cells” meeting, Rhodes, Greece (10/4/2017)
296. 25th Chinese Association of Science and Technology-USA Annual Conference, New York, NY (10/7/2017)
297. Cold Spring Harbor Conference, Biology of Cancer: Microenvironment and Metastasis, Cold Spring Harbor, NY (10/11/2017)
298. The 6<sup>th</sup> Breast Cancer Stem Cell Symposium, Shanghai, China (10/15/2017)
299. 12th Shanghai International Breast Cancer Symposium, Shanghai, China (10/21/2017)
300. AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, Philadelphia, PA (10/27/2017)
301. Canadian Cancer Research Conference, Vancouver, Canada (11/5/2017)
302. Moffitt Cancer Center, Tampa, FL (11/15/2017)
303. 1st China-US Health Forum, Duke University, Durham, NC (11/18/2017)
304. 1st joint EACR-MRS Conference on Seed and Soil: In Vivo Models of Metastasis, Berlin, Germany (11/28/2017)
305. Pathology and Laboratory Medicine Research Seminar Series, Weil Cornell Medicine, New York, NY (2/1/2018)
306. Third AACR-SNMMI Joint Conference on State-of-the-Art Molecular Imaging in Cancer Biology and Therapy, San Diego, CA (2/15/2018)
307. Departments of Pharmacology, UT Southwestern Medical Center, Dallas, TX (3/8/2018)
308. 11th International Symposium on Minimal Residual Cancer, Montpellier, France (5/3/2018)
309. Department of Stem Cell Biology and Regenerative Medicine, University of Southern California (5/8/2018)
310. 5th International Conference on Tumor Microenvironment and Cellular Stress: Signaling, Metabolism, Imaging and Therapeutic Targets, Crete, Greece (6/10/2018)
311. Keystone Symposia on Novel Aspects of Bone Biology, Snowbird, UT (6/16/2018)
312. 4th Gordon Conference on Notch Signaling in Development, Regeneration & Disease, Lewiston, ME (7/25/2018)

### **University and Department Services**

#### **Current:**

- University Task Force on Administrative Burden on Research (2017-2018)
- Animal Research Advisory Group (2015-present)
- Alternate Member, Princeton University IACUC Committee (2016-2019)
- Chair, Faculty Advisory Committee on Athletics and Campus Recreation (2013-2017)
- Faculty Advisor for undergraduate students, Rockefeller College (2006-present)
- Molecular Biology Faculty Graduate Committee (2013-present)
- Molecular Biology Graduate Admissions Committee (2009-present)
- Faculty Advisor, Flow Cytometry Core Facility, Department of Molecular Biology (2013-present)
- Director, Transgenic & Knockout Mouse Core Facility, Cancer Institute of New Jersey (2010-present)
- Member, the Consortium Steering Committee, Cancer Institute of New Jersey (2013-present)

- Rutgers CINJ Nominations Committee (2014-present)
- Thesis Committee Member for: Caleb Bastian (Applied Mathematics, 2011-present), Xin Teng (Chemistry, 2012-present), Allison Simi (Chemical and Biological Engineering, 2013-present), Cesar Perez (2014-2015), Alisha Chitrakar (2014-present), Sneha Rath (2014-present), Krupa Jani (2015-present), Michel Nofal (QCB, 2014-present), Alisya Anlas (Chemical and Biological Engineering, 2015-present), Jonathan Ghergurovich (2017-present), Laura A. Murray (2017-present), Elizabeth Rowland (2015-present)

Past:

- IP Accelerator Fund Review Committee (2015)
- University Task Force in Natural Sciences (2014-2016)
- Quantitative Cell Biology Faculty Search Committee, Department of Molecular Biology (2013-2014)
- Princeton University IACUC Committee (2008-2014)
- Molecular Biology Undergraduate Studies Committee and Department Representative (2010-2014)
- Faculty Advisor, Molecular Biology Graduate Student Symposium (2005)
- Admissions Committee, Joint MD/Ph.D. Program of Robert Wood Johnson Medical School and Princeton University (2005-2014)
- Recruitment Committee, Joint MD/Ph.D. Program of Robert Wood Johnson Medical School and Princeton University (2006-2014)
- Co-Chair, Molecular Biology Department Retreat (2008)
- Chair, Molecular Biology Department Retreat (2009)
- Council of the Princeton University Community (2009-2010, 2011-2012)
- Co-Principal Investigator, NCI Cancer Biology Training Grant, Department of Molecular Biology (2010-2012)
- Chair, Electronic Microscopy/Histology Core Facility Director Search Committee, Department of Molecular Biology (2010)
- Chair, Developmental Biology Faculty Search Committee, Department of Molecular Biology (2010-2011)
- Quantitative Cell Biology Faculty Search Committee, Department of Molecular Biology (2012-2013)
- Schmidt Fund Life Sciences Award Committee (2013)
- Thesis Committee Member for: Yan Yan (2006-2010); Jana Gevertz (Applied Mathematics, 2006-2009); Andrew Womack (2006-2010); Erin Haley (2008-2011); Desmond Brown (2008-2012); Wenwen Fang (2008-2012); Jeongsook Park (2008-2012); Eric Suh (2009-2013); Qike Kyle Chen (2009-2013), Vivek Desai (2010-2014), Michelle Turek (UMDNJ, 2011-2014)

**Community Services**

- Panelist, 10th NJ Breast Cancer Research Fund Survivorship Celebration/Symposium (2/11/2006)
- Speaker, Cancer Awareness Week, Princeton Against Cancer Together (4/24/2006)
- Host, Research Tour for American Cancer Society Volunteers (10/13/2006)
- Faculty Guest Speaker, Princeton Alumni Association in Beijing (7/27/2007)
- Host, Research Tour for American Cancer Society Volunteers (10/31/2007)
- Speaker, Volunteer Leaders of our Making Strides Against Breast Cancer, American Cancer Society (4/28/2008)
- Speaker, Kick-off event of breast cancer fund-raising season, American Cancer Society (5/19/2008)
- Educational lecture on cancer awareness and prevention, Yinghua International School (8/22/2008)
- Host, Research Tour for American Cancer Society Volunteers (10/29/2008)
- Speaker, Breast Cancer Resource Center, YWCA of Princeton (3/10/2009)

- Speaker, Department of Molecular Biology Alumni Science Seminar for the 2009 Princeton University Reunion (5/29/2009)
- Host, Research Tour for American Cancer Society Volunteers (7/27/2009)
- Host, Research Tour for American Cancer Society Volunteers (7/15/2010)
- Member, Board of Directors, Duke University Chinese Alumni Association (4/2009-present)
- Co-Founder, Princeton International Academy Charter School (approved 1/2010)
- Speaker, “Culture, Education, Career and Financial Planning in the United States” Workshop for International Students, Davis International Center, Princeton University (11/20/2010)
- Member, Central Jersey Alumni Admissions Advisory Committee for Duke University (2011 to present)
- Speaker, Breast Cancer Resource Center, YWCA of Princeton (3/11/2011)
- Host, METAvivor Research and Support advocates lab visit (3/14/2011)
- Host, Research Tour for American Cancer Society Volunteers (7/20/2011)
- Speaker, Distinguished Citizens Society International Eastern USA (9/11/2011)
- Host, Research Tour for American Cancer Society Volunteers (8/1/2012)
- Public Forum, National Cancer Center, Singapore (5/20 and 5/22/2013)
- Host, Komen for the Cure sponsored lecture and meeting of the South and Central Jersey community (6/25/2013)
- Host, Research Tour of New Jersey State Legislators (3/12/2014)
- Speaker, Princeton Club of New York (4/14/2014)
- Keynote lecture, Governor’s STEM scholars conference on academia & STEM, Piscataway, NJ (12/13/2014)
- Keynote lecture, American Cancer Society Asian Initiatives, New Jersey Community Reception (2/26/2015)

### Patents

1. *Metadherin* gene as a therapeutic target for chemoresistant metastatic cancer. US Patent Application. (12/215,998)
2. miR-200 family and miR194/192 cluster of miRNAs in cancer progression and metastasis. US Provisional Patent Application. (61/212,551)
3. A mouse model for *in vivo* imaging of mammary stem cell dynamics. US Provisional Patent Application. (#12-2751-1)
4. EGFR inhibitors as therapeutic agents for breast cancer bone metastasis. US Provisional Patent Application. (#09-2509-1)
5. Template-guided DNA rearrangement. US Provisional Patent Application. (#09-2521-1, PI: Laura Landweber)
6. VCAM1 and VLA4 as therapeutic targets for anti-tumor and anti-metastasis therapy. US Provisional Patent Application. (#09-2550-1)
7. Jagged 1 as a marker and therapeutic target for breast cancer bone metastasis. US Patent Application. (#61/438,826)
8. MicroRNAs as functional mediators and biomarkers of bone metastasis. US Provisional Patent Application. (#61/619,668)
9. Use of peptides that block Metadherin-SND1 interaction as treatment for cancer. US Provisional Patent Application. (#62/016914)