

July 21, 2007

CURRICULUM VITAE

- 1. Name:** Lily Yang
2. Office Address: Department of Surgery and Winship Cancer Institute
Emory University School of Medicine
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Atlanta, GA 30322
Telephone: Tel: (404) 778-4269
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3. Citizenship: U.S.A.

4. Current Titles and Affiliation:

a. Academic appointment:

Primary appointment: Assistant Professor
Department of Surgery
Emory University School of Medicine
Atlanta, GA 30322
January 15, 1997

Joint appointment: Assistant Professor
Winship Cancer Institute
Department of Hematology and Oncology
Emory University School of Medicine
Atlanta, GA 30322
February 5, 1998

Full faculty member
Graduate Programs in Biochemistry,
Cell and Developmental Biology (BCDB)
And Molecular Systemic Pharmacology (MSP)
Emory University School of Medicine
Atlanta, GA
November, 2005

5. Previous Academic and Professional Appointments:

- Sept. 1986 – July 1988 Research Associate
Department of Immunology,
Beijing Institute for Cancer Research, Beijing, China
Oct. 1994 – Sept. 1995 Director of Animal study and Research Associate
Gene Therapy Laboratories
University of Southern California School of Medicine
Los Angeles, CA
Aug. 1998- Aug. 1999 Research Fellow,
Group leader for pre-clinical anti-angiogenesis group
Aventis Gencell, Hayward, CA

6. Previous Administrative and/or Clinical Appointments:

Aug. 1998- Aug. 1999 Chair, IACUC Committee
Aventis Gencell, Hayward, CA

7. Education:

Aug. 1978 – July 1983 M. D., July 1983
Department of Medicine
West China University of Medical Sciences
Chengdu, Sichuan Province, China

Sept. 1983 – July 1986 Master of Medicine, Dec. 1986
Microbiology and Immunology
Institute of Epidemiology & Microbiology
Chinese Academy of Preventive Medicine
Beijing, China

Sept. 1988 – May 1993 Ph.D., May 1993
Program in Molecular and Cell Biology
& Biochemistry
Brown University, Providence, RI

9. Postgraduate Training:

May 1993 – Oct. 1993 Postdoctoral Associate,
Department of Medical Oncology
Brown University - Rhode Island Hospital

Oct. 1993 – Sept. 1994 Postdoctoral Fellow
University of Southern California School of Medicine
Los Angeles, CA

Oct. 1995 – Dec. 1996 Postdoctoral Fellow
Department of Genetics
Emory University, Atlanta, GA

10. Committee Memberships:***a. National and International:***

2007 Grant reviewer
National Medical Research Council
Singapore

2007 Breast Cancer Research Program
Department of Defense (DOD)
Synergistic Idea Awards (SIA-3) Panel

2007 Pathogenesis committee
California Breast Cancer Research Program

2006 NIH/NCI, Adhoc Member
Drug Development and Molecular Pharmacology (DMP)
Study Section

2000 – 2005 Scientific Peer Review Panel Member
Breast Cancer Research Program
Department of Defense (DOD)
Molecular Genetics #3
Pathobiology #4

2005 NIH/NCI RAID Program Review Committee

2002-2003 Grant Reviewer
John Sealy Memorial Endowment Fund for
Biomedical Research funds

b. Institutional:

2000 Winship Cancer Institute-ACS seed grant review committee
2001-present Member, Breast Cancer Program,
Winship Cancer Institute

2004-present Member, Drug discovery and Cancer Biology Program,
Winship Cancer Institute

2002-2003 Common Equipment committee for Winship Cancer Institute
2001-present Interviewer for the Faculty Search Committee of the Department of
Surgery, and Department of Hematology and Oncology in the
Winship Cancer Institute

2004-present Department of Surgery Research Committee
2005 Chair, Instrument committee for Cancer Center of Nanotechnology
Excellence (CCNE)

2005-present Member of Emory Head and Neck Cancer SPORE Program
2005 -present Member of Steering Committee, Cancer Center of Nanotechnology
Excellence (CCNE)

11. Consultantship:

Jan. 1998-present InCell Corporation, San Antonio, TX
Dec. 1999-Dec. 2000 Aventis Pharma, Oncology (Gencell), Hayward, CA
Feb. 2003-present: Alvitae Pharmaceuticals, San Francisco, CA

12. Editorships and Editorial Boards:

July 2005-present **Apoptosis**
Editorial Board Member

Sept. 2006-present **The Frontiers in Bioscience**
Managing Editorial Board
Guest Editor for a special issue in Encyclopedia of Bioscience:
“Inhibitors of Apoptosis Proteins as Molecular Targets for
Cancer Therapy”

13. Manuscript Reviewer:

1999-present	Cancer Research
1999	Journal of Virology Methods
2002-present	Laboratory Investigation
2003	Cancer Gene Therapy
2004	Clinica Chimica Acta
2005-present	Clinical Cancer Research
2005-present	Pancreas
2005-present	Molecular Therapy
2005-present	Molecular Cancer Therapeutics
2005-present	Molecular carcinogenesis
2005-present	Apoptosis
2007	International Journal of Cancer
2007	Gastroenterology

14. Honors and Awards:

Sept. 1988 – Aug. 1989	Brown University Scholarship
May 1998 – Dec. 1999	Oak Ridge University Association Junior Faculty Enhancement Award
Jan. 2001 – Dec. 2002	Avon Scholar Award on Breast Cancer Research
Aug. 1999 – July 2005	NIH First Award
April 2006	NCI Alliance for Nanotechnology in Cancer, Monthly Feature
Sept. 2006 - Present	Fellowship, American Academy of Nanomedicine

15. Society Memberships:

1997-1998:	American Association for the Study of Liver Diseases
1997-2001:	American Society of Gene Therapy
1998- Present:	American Association for Cancer Research
2006-Present:	Society of Molecular Imaging
2006- Present:	American Academy of Nanomedicine

16. Research Focus:

Current research projects focus on the development of novel approaches for detection and treatment of human cancer. We are studying the mechanisms of apoptosis resistance and the feasibility of targeting members of the inhibitor of apoptosis family of proteins, such as survivin and XIAP, for induction of tumor specific cell death and for sensitization of cancer cells to chemotherapy. We are also investigating molecular mechanisms of tumor hypoxia in resistance to therapy and tumor progression. For early detection of human cancer, we have developed several nanotechnology approaches, including molecular beacon for detecting cancer cells based on fluorescence-imaging of tumor marker gene expressing cells and tumor-targeted nanoparticles for *in vivo* tumor imaging using optical and MR imaging approaches. We are also developing multifunctional nanoparticles for simultaneous tumor *in vivo* imaging and specific delivery of therapeutic agents.

17. Patents:**a. Issued:**

U.S. Provisional Patent, (# 60/632,666), 2003.

Methods and application of molecular beacon imaging for cancer cell detection.

U.S. Provisional Patent, filed in February, 2004,

Using of a hypoxia enhanced tumor specific promoter for controlling expression of therapeutic genes.

U.S. Provisional Patent, filed on May 2, 2005 (#60/676,812).

Targeted Multifunctional Nanoparticles for Cancer Imaging and Treatment.

b. Pending:

U.S. patent, 60/439,771, full patent application filed in January, 2004,

International patent filed in January, 2005.

Methods of detecting gene expression in normal and cancerous cells.

U.S. patent, full patent application (# 10/542,117) filed on July 15, 2005.

Methods and applications of molecular beacon image for cancer cell detection.

Above two patents have been licensed by Alvitae Pharmaceuticals, San Francisco, CA.

U.S. patent, full patent application (60/676,812), file on May 2, 2006

Targeted Multifunctional Nanoparticles for Cancer Imaging and Treatment.

U. S. patent, (# 60/797,613), filed on May 4, 2007

Nanostructures, methods of synthesizing Thereof, and methods of use thereof

18. Grant support:**a. Active support:****1. Federally funded:**

IAPs as Novel Targets for Cancer Therapy

NIH R01, CA 95643-01, PI (PI: L Yang) \$ 1,264,390 2003 -2008.

Early Detection of Breast Cancer Using Molecular Beacons.

Department of Defense, BC 021952, Idea Award, PI (PI. L Yang), \$ 459,000

2003-2006 (no-cost extension to December 31, 2007).

Emory-GA Tech Nanotechnology Center for Personalized and Predictive Oncology

NIH NCI Center of Cancer Nanotechnology Excellence (CCNE) 1 U54 CA119338-01

Funding for total of 6 projects and 5 cores: \$ 19 millions for five years

10/2005- 9/2010

(CCNE PIs: Drs. Shuming Nie and Jonathan Simons)

Project 1. Quantum Dots and Targeted Nanoparticles Probes for Tumor Imaging
(Co-PI, 20%), (CO-PIs: Dr. S Nie, **L Yang**, H. Mao) \$ 230,000/year

Project 5. Nanotherapeutics. Multifunctional Nanoparticles for Drug Delivery and Targeting
(Co-Investigator, 5%) \$ 230,000/year

Emory Head and Neck SPORE Program
NIH, NCI (SPORE) (PI. D. Shin)

Project 4: Biodegradable Nanoparticle-Formulated Taxol for Targeted Therapy of Head and Neck Cancer

Project Co-Leaders: S Nie (developing nanodrugs), L Yang (Preclinical studies)
and N. Saba (Clinical trial)

\$ 1,150,000 project 4 direct 2007-2012

Emory Molecular and Translational Imaging Center grant (EMTIC)

NIH, NCI P20 (PI. C. Meltzer)

Project 3. uPAR Targeted *in vivo* Molecular Magnetic Resonance Imaging of Breast Cancer

Project Co-PIs: H Mao (MR imaging technology) and L Yang (Developing uPAR targeted magnetic iron oxide nanoparticles, conducting cellular and animal tumor model studies)

\$100,000/year Project 3 direct 2007 – 2010

2. Private Foundation Funded:

Golfers Against Cancer Foundation (Winship Cancer Institute Seed grant)
(PI: **L Yang**)

Development of Targeted Superparamagnetic Iron Oxide (IO) Nanoparticles for *in vivo* Imaging and Therapy of Pancreatic Cancer. \$50,000, 2006-2007.

b. Previous Support:

The Role of Fas/Fas Ligand Signaling System in Herpes Simplex Virus Thymidine Kinase Gene/ganciclovir-mediated Apoptotic Death of TK Gene Modified and Bystander Cells

Winship cancer center-ACS seed grant (PI. L Yang) \$ 15,000 1997 – 1998

Tumor Endothelial Cell Targeting for Treatment of Metastatic Melanoma.

Emory Skin Disease Center Seed grant (PI. L Yang) \$ 17,500 1998 – 1999

Replication Competent Adenoviral Vectors for Liver Cancers

University Research Committee Grant (PI. L Yang) \$17,900 1997 – 1999

Evaluation of the Effects of AvHuATF on the Growth and Tumor Vessel Densities of Human Tumors Implanted in Human Skin Xenografts.

Aventis Pharma, Gencell (PI. L Yang) \$13,000 1999- 2000

IAP Genes As New Therapeutic Targets for Human Breast Cancer

Avon Foundation, (PI. L Yang) \$150,000 2001- 2003

Early Detection of Pancreatic Cancer Using Molecular Beacons

Wallace H. Coulter Translational/Clinical Research Seed Grant Program, CO-PI (PI. G Bao)
 \$200,000 2001- 2003

Death Signaling in HSV-TK Gene Modified Tumor Cells

NIH R29, CA 80017-04, (PI. L Yang) \$535,500 1999- 2005

Targeted Magnetic Nanoparticle Probes for Non-invasive Imaging of Breast Cancer.

Friends for An Early Breast Cancer Test (PI. L Yang) \$40,000 2005 -2006

*c. Pending applications:***HIF-1 α / survivin pathway in progression of breast cancer**

NIH, NCI, R01, (PI. L Yang) \$1,912,500 2007 – 2012

Receptor-targeted Radiotracers for Detection of Pancreatic Cancer

NIH NCI, R21 (PI. L Yang) \$275,000/two years 2008-2010

Targeted Nanoparticles For Intraoperative Optical Imaging of Breast Cancer Margins

NIH, NCI, R01, (PI. L Yang), \$250,000/year 2008 – 2013

Emory Molecular and Translational Imaging Center grant (EMTIC)

NIH, NCI P50 (PI. C. Meltzer)

Project 3. uPAR Targeted *in vivo* Molecular Magnetic Resonance Imaging of Breast Cancer

Project Co-PIs: H Mao (MR imaging technology) and L Yang (Developing uPAR targeted magnetic iron oxide nanoparticles, conducting cellular and animal tumor model studies)

\$200,000/year Project 3 direct 2008 – 2013

Targeting uPAR for development of multifunctional nanoparticles

NIH, NCI, R01 (PI, L. Yang) \$ 1,250,000 direct 2008-2012

Labile Catalytic Packaging of siRNA for Breast Cancer Therapy

NIH, NCI, R21, Co-PI (PI, H He, Rutgers University).

\$ 120,000 (direct, subcontract) 2007-2009

Nanoparticle Based Magnetic Microfluidic Enrichment System (MMES)

NIH, STTR, Co-PI (PI, YA Wang, Ocean Nanotech)

\$75,000 Phase 1 (direct, subcontract) 2008-2009

Bioluminescence Tomography of Small Animals

NIH, R01, Co-PI (PI, H Jiang, University of Florida)

\$ 93,000 (direct, subcontract) 2008-2012

19. Clinical Service Contributions/Translational Research:***Principal Investigator for clinical trials:***

IRB # 933-2001

Early Detection of Pancreatic Cancer Using Molecular Beacons

Funding source: Wallace Coulter Foundation (from 2001-2006)

IRB # 1039-2002

Early Detection of Breast Cancer Using Molecular Beacons

Funding source: Department of Defense (From 2003 – present)

20. Formal Teaching:***a. Medical Student Teaching***

1996: Medical Genetics: Course facilitator

2002: Human and Molecular Genetics: Course facilitator

b. Graduate Program

Training Program:

2003-2005: Cancer Pharmacology: Lecturer for Gene therapy

(Students' evaluations: scores are 4 to 5. 5 is the best score)

2006: Cancer Pharmacology: Lecturer for Nanomedicine

21. Supervisory Teaching:***a. PhD. Graduate Students:***

2002: Graduate student rotation, Manu o. Platt
Department of Biomedical Engineering, Emory University

2002: PhD Advisory Committer Member for Yangqing Xu,
Department of Biomedical Engineering, Emory University
/Georgia Institute of Technology
Current position: Postdoctoral Fellow, Harvard University

2002-2004: Cancer biology advisor, Xiaohu Gao,
PhD graduate student of Dr. Shuming Nie,
Department of Chemistry and
Biomedical Engineering,
Emory University School of Medicine
Current position: Assistant Professor
Department of Bioengineering
University of Washington
Seattle, WA

2006-present: ***Thesis advisor:***

Third year PhD. Graduate Student: Sean Kadar
 Molecular Systemic Pharmacology program
 Project title: Targeting IAPs for the treatment of pancreatic cancer

2006-present: ***Member of Thesis Committee:***

PhD. Student: Shala Thomas
 Molecular Systems pharmacology program

2006-present: ***Member of Thesis Committee***

Jeanine Southerland
 PhD Graduate Student
 BCDB Program
 Emory University School of Medicine

2007-present:

Member of Thesis Committee
 PhD. Student: Andrew M. Smith
 Biomedical Engineering program
 Emory University School of Medicine and
 Georgia Institute of Technology

2007

Lab rotation

Jane O. Ullah
 BCDB program
 Project title: Identification and characterization of cancer stem
 cell-like population in human mammary epithelial MCF-10
 series of cell lines

Training for PhD graduate student outside Emory University:

2006

PhD. thesis committee
 PhD thesis defense (Sept. 2006)
 Outside Reader for Rebecca Rozich
 Program in Molecular and Cell Biology & Biochemistry
 Brown University, Providence, RI.

b. Postdoctoral fellow:

2000- 2001 Hui Yan: current position: Research Associate, MD Anderson Cancer Center
 2002-2003 Yimin Lin: current position: Instructor, Morehouse University
 2003-2007 Xianghong Peng: Instructor, Emory University
 2003-present Prasanthi Karna: current postdoctoral fellow
 2007-present Hari Krishna Sajja: current postdoctoral fellow
 CCNE postdoctoral Fellowship

c. Residency Program:

Mentor for surgical resident:
 2006-present Mark Smith, MD.
 Third-year surgical resident
 Two-year research training
 Project title: Simultaneous detection of mRNA and protein levels of tumor markers using molecular beacon and quantum dots for detection and nanotyping of human cancer cells

d. Other

2003 Joshua Logan: medical student summer research program.
 2003-2004 Jin-Dang Xia: Visiting Scientist. Chief of Surgery, The First Hospital of Guangzhou, P. R. China
 2004-2006 Wonkyung Kang: Visiting Scientist, Assistant Professor of Surgery, Catholic University of Korea, South Korea.
 2003-2004 Interviewer for Admission Committee of MD/PhD program at Emory University School of Medicine

22. Lectureships, seminar invitations and visiting Professorships.

April 1997 Novartis /GTI: Gaithersburg, Maryland
 Establishment of a three-dimensional culture model of human primary tumor tissue slices for evaluation of the effects of replication competent adenoviral vectors.

March 1998 Department of Dermatology, Melanoma study group.
 Cancer Gene Therapy.

July 2000 Winship Cancer Institute Elkin Cancer Biology Seminar series
 Apoptotic signaling in HSV-TK/GCV induced cell death.

July 2001 Winship Cancer Institute Elkin Cancer Biology Seminar series
 IAP genes as new therapeutic targets.

November 2002 Department of Chemistry and Bioengineering, Emory University
 IAPs as molecular targets for cancer therapy.

June 2003 Winship Cancer Institute Elkin Cancer Biology Seminar series
 Molecular beacons for detection of human cancer cells.

May 2003 Department of Gynecology & Obstetrics Grand Rounds
 Inhibitor of apoptosis proteins as molecular targets for cancer treatment and diagnosis.

June 2004 Xian Jiang-Tong University Medical School, P. R. China
 Targeting Inhibitor of apoptosis proteins for cancer treatment and diagnosis.

March 2005 Clinical Research Meeting Series, the University of New Mexico Cancer Research and Treatment Center
 Targeting HIF-1/Survivin pathway for cancer therapy.

- June 2005 Ovary Cancer Research Program, Fox Chase Cancer Institute, Philadelphia
Molecular Beacons for Cancer Research.
- July 2005 Winship Cancer Institute Elkin Cancer Biology Seminar series
HIF-1 alpha/Survivin pathway mediated apoptosis resistance.
- February 2006 Departments of Chemistry and Biomedical Engineering, Emory University
Multifunctional nanoparticles for non-invasive tumor imaging and therapy.
- February 2006 Pathobiology Program Seminar, Brown University School of Medicine,
Providence, RI.
Application of nanotechnology for cancer detection and therapy.
- March 28 2006 Emory University-Georgia Institute of Technology Frontiers of Cancer
Nanotechnology Symposium.
Quantum dots and targeted nanoparticle probes for cancer.
- April 2006 Basic Science and Clinical/Translational Partnerships Seminar Series
Emory University School of Medicine
Nanotyping and Nanoimaging of Breast Cancer
- April 2006 Georgia State University, Department of Chemistry Seminar
Application of multifunctional nanoparticles for cancer detection and therapy.
- September 2006 Winship Cancer Institute, Hematology and Oncology Grand rounds.
Tumor targeted nanoparticles for molecular imaging and therapy of
human cancer.
- December 2006 Winship Cancer Institute Elkin Cancer Biology Seminar series
Histone deacetylase (HDAC): molecular targets for cancer therapy and a
novel function of a member of HDAC family of proteins in regulating the
apoptotic pathway under hypoxic conditions.
- December 2006 Emory-Georgia Tech CCNE Workshop
The development of multifunctional nanoparticles for tumor imaging and
therapy.
- January 2007 Breast cancer conference, Winship Cancer Institute, Emory University
School of Medicine.
Multifunctional nanoparticles for detection and therapy of breast cancer.
- April 2007 The 2007 Emory-Georgia Tech Frontiers of Cancer Nanotechnology
Symposium
Tumor targeted multifunctional nanoparticles for tumor imaging and
Therapy.
- July 2007 Beijing University, Beijing Institute For Cancer Research, Beijing, China
Multifunctional nanoparticles for cancer detection and therapy.
- July 2007 Tianjin Medical University, Tianjin, China
Nanotechnology for cancer detection and therapy.

23. Invitations to National or International Conferences:

- 2005 AACR Annual Meeting, Experimental and Molecular Therapeutics Anaheim, CA. Crosstalk Between EGFR and HIF-1 alpha Signaling Pathways Increases Resistance to Apoptosis Under Normoxic Conditions by Upregulating Survivin in Human Cancer Cells.
- 2005 Era of Hope Department of Defense Breast Cancer Program Meeting, Philadelphia, PA Detection of Breast Cancer Cells by Fluorescence Imaging of Tumor Marker Gene Expression Using Molecular Beacons.
- 2006 Symposium on Nanotechnology for Cancer Prevention, Diagnosis and Treatment CancerNano 2006, Boston, MA Development of Targeted Superparamagnetic Iron Oxide (IO) Nanoparticles for *in vivo* Imaging and Therapy of Pancreatic Cancer.
- 2006 The 11th International Symposium of Society of Chinese Bioscientists in America, San Francisco, CA Targeting HIF-1alpha and Survivin Pathways for Cancer Therapy.
- 2006 The Second Annual Meeting of American Academy of Nanomedicine, Washington, DC. Tumor Targeted Nanoparticles for Molecular Imaging and Therapy of Human cancer.
- 2006 International Conference on Bio and Pharmaceutical Science and Technology. San Diego, CA. Multifunctional Magnetic Iron Oxide (IO) Nanoparticles for *in vivo* Imaging and Therapy of Breast and Pancreatic Cancers.
- 2006 The 2007 AACR Annual Meeting, Minisymposium: Cellular and Molecular Biology Los Angeles, CA. HIF-1 alpha activated tumor specific expression of survivin gene is a novel transcriptional mechanism.
- 2007 The 2007 AACR Annual Meeting, Minisymposium 61: Chairperson: Cell Responses: Senescence and Autophagy.

24. Other Activities:

- 2005 Best Poster Award for Translation Cancer Research
Winship Cancer Institute Research Symposium
- 2006 MSP and BCDB graduate program orientations
Novel Approaches for Cancer Detection and Therapy
- 2007 Interviewer, MSP and BCDB graduate program recruitment

25. Bibliography:

a. Published and accepted research articles in refereed Journals:

1. **Yang L** and Nei DK. Comparison studies on immunogenicities between killed and attenuated live leptospire. *Chinese Journal of Zoonoses* 4 (3): 33-35, 1988.
2. **Yang L**, Liu H, Li Y, and Wang YM. Serum preselection of cancer patients and establishment of lymphoblastoid cell lines secreting human monoclonal antibodies against breast cancer. *Chinese Journal of Immunology* 5 (6): 332-335, 1989.
3. Liu H, Xu ZL, Wang Y, **Yang L**, Feng O, Li Y, Wang YM and Zhang GG. Production of anti-tumor human monoclonal antibodies using different approaches. *Human Antibodies and Hybridomas*. 4 (1): 2-8, 1992.
4. **Yang L**, Faris RA and Hixson DC. Long term culture and characteristics of normal rat liver bile duct epithelial cells. *Gastroenterology* 104:840-852, 1993. (featured on the cover of the Journal)
5. **Yang L**, Faris AR and Hixson DC. Characterization of a mature bile duct antigen expressed on a subpopulation of biliary ductular cells but absent from oval cells. *Hepatology*, 18 (2): 357-366, 1993.
6. **Yang L**, Faris RA and Hixson DC. Phenotypic heterogeneity within clonogenic ductal cell populations isolated from normal adult rat liver. *Proceeding of the Society for Experimental Biology and Medicine*, 204: 280-288, 1993.
7. Faris RA, McBride A, **Yang L**, Affigne S, Walker C, and Cha J. Isolation, propagation, and characterization of rat liver serosal mesothelial cells. *American Journal of Pathology*. 145(6):1432-43, 1994.
8. **Yang L**, Hwang R, Pandit L, Gordon EM, Anderson WF and Parekh D. Gene Therapy of metastatic pancreas cancer with intraperitoneal injections of concentrated retroviral herpes simplex thymidine kinase vector supernatant and ganciclovir. *Annals of Surgery* 224(3): 405-417, 1996.
9. Hixson DC, Chapman L, McBride A, Faris RA and **Yang L**. Antigenic Phenotypes common to rat oval cells, primary hepatocellular carcinomas and developing bile ducts. *Carcinogenesis*, 18(6): 1169-1175, 1997.
10. **Yang L**, Skotzko M, Stain S, Hellenbeck P, Chiang Y, French WF and Gordon EM. Adenoviral vector-mediated gene transfer in long term human hepatocyte cultures. *International Journal of Pediatric Hematology and Oncology*. , 4(4): 307-315, 1997.
11. **Yang L**, Hwang R, Chiang Y, Gordon EM, Anderson WF and Parekh D. Mechanisms for ganciclovir resistance in gastrointestinal tumor cells transduced with a retroviral vector containing the herpes simplex thymidine kinase gene. *Clinical Cancer Research*, 4(3): 731-41, 1998.

12. **Yang L**, Chiang L, Lenz H.J, Deneberge K, Gordon EM, Anderson WF and Parekh D Intercellular communication mediates bystander effect during herpes simplex thymidine kinase/ ganciclovir- based gene therapy for human gastrointestinal tumor cells. *Human Gene Therapy*, 9:719-728, 1998.
13. Wood WC, Anderson M, Lyles R, Styblo TM, Murray DM, Staley C, **Yang L**, Carlson GW. Can We Select Which Patients With Small Breast Cancers Should Receive Adjuvant Chemotherapy? *Annals of Surgery* 235 (6): 859-862, 2002.
14. **Yang L**, Cao ZH, Yan H and Wood WC. Co-existence of high levels of apoptotic signaling and inhibitor of apoptosis proteins in human tumor cells: Implication for cancer specific therapy. *Cancer Research*, 63: 6815-6824, 2003.
15. **Yang-L**, Cao Z, Li F, Post D, Van Meir E, Zhong H and Wood WC. Tumor-specific gene expression using the survivin promoter is further increased by hypoxia. *Gene Therapy*, 11, 1215-1223, 2004.
16. 16. Peng XH, Cao ZH, Xia JT , Carlson W. G, Lewis MM, Wood, WC and **Yang L**. Real-Time Detection of Gene Expression in Cancer Cells using Molecular Beacon Imaging: New Strategies for Cancer Research. *Cancer Research*, 65 (5), 1909-1917, 2005.
17. Tan D, Ling X, Ramnath N, Younis T, Li Q, Wu J, **Yang L**, Zhou M, Slocum HK and Li F. Differential expression of survivin and its variants is functionally associated with cell viability, disease relapse and tumor differentiation in non-small-cell lung cancer (NSCLC). *Lung Cancer*, 49; 353-361, 2005.
18. **Yang L**, Cao ZH, Lin YM, Wood WC and Staley CA. Molecular beacon imaging of tumor marker gene expression in pancreatic cancer cells. *Cancer Biology & Therapy*, 4(5), 561-560, 2005. (Featured on the cover of the journal)
19. **Yang L**. Mao H, Cao Z, Wang AY, Peng X, Wang X, Karna P, Adams A, Yuan QA, Staley CA, Wood WC, Nie S and Gao X. Development of peptide-conjugated Superparamagnetic Iron Oxide (IO) Nanoparticles for *in vivo* Imaging and Therapy of Pancreatic Cancer. *Proceeding of NSTI Nanotechnology*, Vol. 2, p17-20, 2006.
20. Zhu N, Gu L, Findley HW, Chen C, Dong JT, **Yang L** and Zhou M. KLF5 interacts with p53 in regulating survivin expression in acute lymphoblastic leukemia. *Journal of Biological Chemistry*, 281:14711-14718, 2006.
21. Peng X, Karna P, Cao Z, Jiang B, Zhou M, and **Yang L**. Cross-talk between epidermal growth factor receptor and HIF-1 signal pathways increases resistance to apoptosis by upregulating survivin gene expression. *Journal of Biological Chemistry*, (36):25903-14, 2006.
22. Peng X, Karna P, Regan RM, Xiuju Liu, Wood WC, Lee HY and **Yang L**. Downregulation of the inhibitor of apoptosis proteins by deguelin selectively induces apoptosis in breast cancer cells. *Molecular Pharmacology*. 71: 101-111, 2007.

23. Han, A, **Yang L**, and Frazier AB. Quantification of the Heterogeneity in Breast Cancer Cell Lines using Whole Cell Impedance Spectroscopy, *Clinical Cancer Research*, Vol. 13, 1, pp. 139-143, 2007.
24. Wu J, Pan L, Song L, Liang P, **Yang L** and Li F. Molecular mechanism of upregulation of survivin transcription by the AT-rich sequence-selective DNA-Binding anti-tumor agent, Hoechst 33342: evidence for survivin involvement in drug resistance. *Nuclear Acid Research*, 35: 2390 – 2402, 2007.
25. Agren N, Reddy K, Bhandarkar S, Kurenova EV, **Yang L**, Cance WC, Welsh Mand Arbiser JE. Shb gene knockdown increases the susceptibility of SVR endothelial tumor cells to apoptotic stimuli. *Journal of Investigative. Dermatology*, in press, 2007

b. Review articles:

1. Gao X, **Yang L**, Petros J, Marshall FF, Simons JW and Nie S. *In vivo* molecular and cellular imaging with quantum dots. *Current Opinion in Biotechnology*, Invited Paper, 2005, 16, 63-78. (on the cover of the Journal).
2. Rhyner MN, Smith AM, Gao X, Mao H, **Yang L** and Nie S. Quantum dots and multifunctional nanoparticles: new contrast agents for tumor imaging. *Nanomedicine*, 1(2), 209-217, 2006.

c. Submitted:

1. Fang J, Min Ding M, **Yang L**, Shi X, and Jiang BH. PI3K/PTEN/AKT Signaling plays an Important Role in Prostate Tumor Angiogenesis.
2. Yezhelyev MV, Morris C, Gao X, Marcus A. Lewis M, Cohen C, **Yang L**, Simons JW, Rogatko A, Nie S and O'Regan RM. Simultaneous and quantitative detection of multiple biomarkers in human clinical breast cancers using semiconductor multicolor quantum dots.

d. To be Submitted

1. Karna P, Cao Z, Zhong H, Li F and **Yang L**. HIF-1 alpha activated tumor specific expression of survivin gene is mediated by a novel transcriptional mechanism.
2. Karna P, Cao Z and **Yang L**. Direct interaction of histone deacetylase-6 with HIF-1 alpha regulates survivin gene transcription independent from its deacetylase activity.
3. Mao H, Peng X, Wang YA, Gao X, Wang X, Ni C, Mehta M, Wood WC, Nie S, and **Yang L**. Receptor-Targeted Magnetic Iron Oxide Nanoparticles for *in Vivo* MR Imaging of breast cancer.

4. **Yang L**, Mao H, Wang YA, Cao Z, Peng XH, Wang X, Ni C, Duan H., Yuan⁶, Adams G, Smith M, Wood WC, Gao X and Nie S Signal chain anti-epidermal growth factor receptor antibody-conjugated nanoparticles for In vivo target and imaging of pancreatic cancers.
5. **Yang L**, Cao Z, Wang YA, Wang X, Ni C, Mehta M, Peng XH, Mao H and Nie S. Urokinase plasminogen activator receptor-targeted multifunctional nanoparticle probes for *in vivo* optical and MR imaging of pancreatic cancer.
6. **Yang L** Peng XH, Wang A, Gao X, Nie S and. *In vivo* optical imaging of breast cancer using peptide-targeted near infrared quantum dots.

e. Book chapters:

1. Hixson DC, Faris RA, **Yang L** and Novikoff P. Antigenic clues to liver development, renewal and carcinogenesis: An integrated model. In *The Role of Cell Types in Hepatocarcinogenesis*, Editor: A. E. Sirica, CRC Press, 1992, Page 151-182. (Chapter 8), 1992.
2. **Yang L**. Disfunction of the Apoptotic Pathway in Cancer Cells. In “Application of Apoptosis to Cancer Treatment”, Edited by Mels Sluysers, Kluwer Academic Publishers, Page 1-28, 2005.
3. **Yang L**. Mechanisms of Apoptosis Resistance in Breast Cancer. In “Breast Cancer Management in the Era of Molecular Medicine”, Edited by M. Piccart, W. Wood, M.-C. Hung, L.J. Solin and F. Cardoso, Springer-Verlag, 2007.

f. Other Publications:

Abstracts (during last six years):

1. **Yang L**, Macken K, Staley C, and Daneker G. Establishment of a three dimensional tissue culture model to evaluate adenoviral vector mediated gene therapy in primary and metastatic human liver malignancies. ASSO Meeting, 1998.
2. **Yang L**. Breeden C, Macken K, Staley CA, Daneker GW and Wood WC. Cell death pathway and ganciclovir sensitivities in HSV-TK modified tumor cell lines. Proceeding Programmed Cell Death Regulation: Basic Mechanisms and Therapeutic Opportunities. p B64, 2000.
3. **Yang L**, Zhang Y and Yan H. Identification of a novel therapeutic target through dissecting the apoptotic pathway in human tumor cell lines. Proceeding of the 2001 AACR-NCI-EORTC International Conference, p68, 2001.

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