

BIOGRAPHICAL SKETCH

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NAME: Lin, Yong

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POSITION TITLE: Professor of Biostatistics

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Xiamen University, Xiamen, Fujian, China	B.S.	01/1978	01/1982	Mathematics
Xiamen University, Xiamen, Fujian, China	M.S.	01/1982	01/1985	Mathematics
The Pennsylvania State University, PA	M.A.	09/1987	05/1994	Mathematics
The Pennsylvania State University, PA	Ph.D.	09/1994	05/1997	Statistics

A. Personal Statement

I am a Professor of Biostatistics at the Biostatistics Shared Resource of Cancer Institute of New Jersey, and the Biostatistics and Epidemiology Department of the School of Public Health, Rutgers University. I have collaborated with many investigators including basic scientists, epidemiologists and clinicians for their observational, laboratory and clinical studies for over 23 years. I have extensive experience in designs of clinical studies, and statistical analyses related to biomedical research as well as data management and biostatistical computing using large databases, including SEER-Medicare, NHANES, and Framingham heart study data. My work has led to over 200 peer-reviewed publications in many leading journals in the areas of statistical methodology, cancer research, and epidemiology with additional publications underway. It has been a pleasure to work for CINJ and make contributions to the growth of the institute since 1999. My extensive experience will be valuable to CCSG program.

B. Positions, Scientific Appointments and Honors**Positions and Employment**

2013 -- Professor in School of Public Health of Rutgers, The State University of New Jersey
 2011 – 2013 Professor, School of Public Health of Univ. of Medicine and Dentistry of New Jersey
 2005 – 2011 Associate Professor in the School of Public Health of Univ. of Medicine and Dentistry of New Jersey
 2001 – 2005 Assistant Professor in the School of Public Health of Univ. of Medicine and Dentistry of New Jersey
 1999 -- Biostatistician at Rutgers Cancer Institute of New Jersey, Univ. of Medicine and Dentistry of New Jersey
 1998 -- 1999 Contract Statistician in Merck & Co. Inc., Rahway, NJ
 1997 -- 1998 Statistician in Acer/Excel Inc.
 1997 Research Assistant in Statistics Department of Penn State University
 1996 Statistical Consultant in Population Research Institute of Penn State University
 1996 Research Computing Assistant in Statistics Department of Penn State University
 1995 -- 1996 Pre-doctoral Lecturer in Statistics Department of Penn State University
 1994 -- 1995 Teaching Assistant in Statistics Department of Penn State University
 1993 -- 1994 Statistical Consultant in Statistical Consulting Center of Penn State University

1988 -- 1994 Mathematics Instructor in Mathematics Department of Penn State University
1985 -- 1987 Mathematics Lecturer in Mathematics Department of Xiaman University, China

Note: On July 1st, 2013 The University of Medicine and Dentistry of New Jersey (UMDNJ) merged with Rutgers, The State University of New Jersey. Appropriate name changes have been made above for current positions only.

Professional Societies

Member of American Statistical Association
Member of International Biometrics Society

Committee of University

2002 - 2006 Academic Information Technology Advisory Committee.

Honors

1981 – 1985 Honor Student, Xiamen University as an undergraduate and graduate student
1994 Vollmer-Kleckner Scholarship in Science; The Pennsylvania State University
1995 Wheeler P. Pavey Graduate Fellowship Award; The Pennsylvania State University
1997 Employee of the Year; Acer/Excel Inc.
1999 Excellence Award, Merck & Co. Inc.
2007 – 2008 Foundation of UMDNJ's Excellence in Teaching Award
2008 Member of Delta Omega Honorary Society in Public Health

C. Contributions to Science

1. **Statistical Methodology Research.** My collaborative research has required developing new statistical methods, and my statistical methodology research has led to many statistical methodological paper publications in leading peer-reviewed statistical journals. Some of these papers were motivated by the clinical studies conducted at Rutgers Cancer Institute of New Jersey (CINJ), later applied to many other clinical studies there, and were highly cited and praised by the review teams at the site visits for the Cancer Center Support Grant (CCSG) renewals. The areas of this research include Phase I cancer studies, Phase II cancer studies, Phase II/III cancer studies, Precision medicine clinical trial design, Methods based on mixture model approaches and others.
 - a. **Lin Y**, Shih WJ. Statistical properties of the traditional algorithm-based designs for phase I cancer clinical trials. *Biostatistics*. 2001 Jun;2(2):203-15. PubMed PMID: 12933550.
 - b. **Lin Y**, Shih WJ. Adaptive two-stage designs for single-arm phase IIA cancer clinical trials. *Biometrics*. 2004 Jun;60(2):482-90. PubMed PMID: 15180674.
 - c. Liao JG, **Lin Y**, Selvanayagam ZE, Shih WJ. A mixture model for estimating the local false discovery rate in DNA microarray analysis. *Bioinformatics*. 2004 Nov 1;20(16):2694-701. PubMed PMID: 15145810.
 - d. **Lin Y**, Shih WJ, Lu SE. Two-stage enrichment clinical trial design with adjustment for misclassification in predictive biomarkers. *Statistics in Medicine*. 2019; 38:5445-5469.

Collaborative Research. Over the last seventeen years, I worked with many investigators at CINJ, EOHSI and Rutgers Cancer Laboratory including Drs. Eric Rubin, Roger Strair, Steve Shiff, Elizabeth Poplin, Michael Reiss, D.L. Toppmeyer, Honghua Li, Jin-Ming Yang, Darlene Gibbon, Khew-Voon Chin, Allan Conney, Chung S. Yang, Cory Abate Shen, Ah-Ng Tony Kong, Grace L. Lu-Yao, Elisa Bandera, Bo Qin and many others. The areas included cancer clinical trials, laboratory and animal studies, genetic and basic science, and epidemiological investigations. The collaborative research led to the publications of over 170 collaborative papers that included me as a coauthor and led to over 30 grants from the NIH/NCI and other funding agencies that included me as a co-investigator or biostatistician.

2. **Epidemiology Studies on Cancer.** Most papers based on epidemiology studies were the products of over 10 years of collaborations with epidemiologists Dr. Bandera and Dr. Lu-Yao. The studies were mostly based on large national data sets, such as Surveillance, Epidemiology and End Results (SEER)-Medicare linked data, National Health and Nutrition Examination Survey (NHANES) data, and Framingham Heart Studies (FHS) data. Most of these papers were on studies of breast and prostate cancers, or the impact of obesity on cancer. The following are some representative papers.

- a. Bandera EV, **Qin B, Lin Y**, Xu B, Chanumolu D, Llanos AAM, Zeinomar N, Omene C, Pawlish KS, Ambrosone C, Demissie K, Hong CC. Association of body mass index, central obesity, and body composition with mortality after breast cancer diagnosis in a population-based prospective study of Black breast cancer survivors. *JAMA Oncology*. 2021 Jun 4; 7(8):1-10. doi: 10.1001/jamaoncol.2021.1499. PMID: 34086040
 - b. Kinney AY, Scott T, Walters ST, **Lin Y**, Lu SE, Kim A, Ani J, Le Compte JG, O'Malley D, Heidt E, Stroup A, Paddock L, Grumet S, Boyce TW, Toppmeyer D, McDougal J. Improving Uptake of Cancer Genetic Risk Assessment in a Remote Tailored Risk Communication and Navigation Intervention: Large Effect Size but Room to Grow. To appear in *Journal of Clinical Oncology*.
 - c. Lu-Yao GL, Albertsen PC, Moore DF, Shih W, **Lin Y**, DiPaola RS, Yao SL. Survival following primary androgen deprivation therapy among men with localized prostate cancer. *JAMA*. 2008 Jul 9;300(2):173-81. PubMed PMID: 18612114; NIHMSID: NIHMS92658; PubMed Central PMCID: PMC2645653.
 - d. Llanos AAM, **Lin Y**, Chen W, Yao S, Norin J, Chekmareva MA, Omene C, Cong L, Omilian AR, Khoury T, Hong CC, Ganesan S, Foran DJ, Higgins M, Ambrosone CB, Bandera EV, Demissie K. Immunohistochemical analysis of adipokine and adipokine receptor expression in the breast tumor microenvironment: associations of lower leptin receptor expression with estrogen receptor-negative status and triple-negative subtype. *Breast Cancer Research*, 2020; 22:18; <https://doi.org/10.1186/s13058-020-1256-3>.
3. **Laboratory and Animal Studies on Cancer.** I have been working with Dr. C.S. Yang, Dr. Allan Conney, Dr. Ah-Ng Tony Kong, and Dr. Suh from Cancer Research Lab at Rutgers University since shortly after I joined UMDNJ. Our productive works over the years have led to many publications and received a lot of NIH/NCI funding supports. Our collaborative papers are mostly based on the results from the analyses of the data from laboratory and animal studies on cancer treatments and preventions. The following are some representative papers based on laboratory and animal studies.
- a. Ito K, Ito N, Yadav SK, Suresh S, **Lin Y**, Dhib-Jalbut S. Effect of switching glatiramer acetate formulation from 20 mg daily to 40 mg three times weekly on immune function in Multiple Sclerosis. *Multiple Sclerosis Journal: Experimental, Translational and Clinical*. 2021 Jul 28; 7(3). DOI: 10.1177/20552173211032323. ID: MSJ-ETC-21-0050.R2
 - b. Ju J, Hong J, Zhou JN, Pan Z, Bose M, Liao J, Yang GY, Liu YY, Hou Z, **Lin Y**, Ma J, Shih WJ, Carothers AM, Yang CS. Inhibition of intestinal tumorigenesis in *Apc^{min}/+* mice by (-)-epigallocatechin-3-gallate, the major catechin in green tea. *Cancer Res*. 2005 Nov 15;65(22):10623-31. PubMed PMID: 16288056.
 - c. Lu YP, Lou YR, Bernard JJ, Peng QY, Li T, **Lin Y**, Shih WJ, Nghiem P, Shapses S, Wagner GC, Conney AH. Surgical removal of the parametrial fat pads stimulates apoptosis and inhibits UVB-induced carcinogenesis in mice fed a high-fat diet. *Proc Natl Acad Sci U S A*. 2012 Jun 5;109(23):9065-70. PubMed PMID: 22615388; PubMed Central PMCID: PMC3384184
 - d. Smolarek AK, So JY, Burgess B, Kong AN, Reuhl K, **Lin Y**, Shih WJ, Li G, Lee MJ, Chen YK, Yang CS, Suh N. Dietary administration of δ - and γ -tocopherol inhibits tumorigenesis in the animal model of estrogen receptor-positive, but not HER-2 breast cancer. *Cancer Prev Res (Phila)*. 2012 Nov;5(11):1310-20. PubMed PMID: 22964476; NIHMSID: NIHMS405350;
4. **Genetic Studies on Cancer.** The papers based on genetic studies were the collaborative works with Dr. K.V. Chin, Dr. H. Li., and Dr. Abate-Shen. The following are some representative papers.
- a. Chin KV, Seifer DB, Feng B, **Lin Y**, Shih WC. DNA microarray analysis of the expression profiles of luteinized granulosa cells as a function of ovarian reserve. *Fertil Steril*. 2002 Jun;77(6):1214-8. PubMed PMID: 12057731.
 - b. Gao H, Ouyang X, Banach-Petrosky W, Borowsky AD, **Lin Y**, Kim M, Lee H, Shih WJ, Cardiff RD, Shen MM, Abate-Shen C. A critical role for p27kip1 gene dosage in a mouse model of prostate carcinogenesis. *Proc Natl Acad Sci U S A*. 2004 Dec 7;101(49):17204-9. PubMed PMID: 15569926; PubMed Central PMCID: PMC535400.
 - c. Wang HY, Luo M, Tereshchenko IV, Frikker DM, Cui X, Li JY, Hu G, Chu Y, Azaro MA, **Lin Y**, Shen L, Yang Q, Kambouris ME, Gao R, Shih W, Li H. A genotyping system capable of simultaneously

analyzing >1000 single nucleotide polymorphisms in a haploid genome. *Genome Res.* 2005 Feb;15(2):276-83. PubMed PMID: 15687291; PubMed Central PMCID: PMC546529.

- d. Wang HY, Greenawalt D, Cui X, Tereshchenko IV, Luo M, Yang Q, Azaro MA, Hu G, Chu Y, Li JY, Shen L, **Lin Y**, Zhang L, Li H. Identification of possible genetic alterations in the breast cancer cell line MCF-7 using high-density SNP genotyping microarray. *J Carcinog.* 2009;8:6. PubMed PMID: 19439911; PubMed Central PMCID: PMC2687141
5. **Cancer Clinical Trials.** I have had a joint appointment with CINJ ever since I joined UMDNJ (merged with Rutgers University on July 1, 2003). I provide statistical and grant support for many clinical studies including study designs, monitoring, and analyses of data. Several of my methodological papers were inspired by solving some issues on the designs and analyses of clinical studies, and later applied to other clinical study designs and analyses. They have been praised by the review teams at the site visits for our CCSG renewals. The following is a list of representative papers based on clinical trials.
- a. Jabbour SK, Berman AT, Decker RH, **Lin Y**, Feigenberg SJ, Gettinger SN, Aggarwal C, Langer CJ, Simone II CB, Bradley JD, Aisner J, Malhotra J. Phase 1 Trial of Pembrolizumab Administered Concurrently With Chemoradiotherapy for Locally Advanced Non-Small Cell Lung Cancer: A Nonrandomized Controlled Trial. *JAMA Oncology.* 2020 Feb 20;e196731. doi: 10.1001/jamaoncol.2019.6731
 - b. Shah MM, Rhee K, NeMoyer RE, **Lin Y**, Jabbour S, Kooby DA, Maithel SK, Carpizo DR. Conditional Survival Analysis of Hepatocellular Carcinoma. *Journal of Surgical Oncology,* 2020; 122:684-690.
 - c. Mehnert JM, Tan AR, Moss R, Poplin E, Stein MN, Sovak M, Levinson K, Lin H, Kane M, Gounder M, **Lin Y**, Shih WJ, White E, Rubin EH, Karantza V. Rationally designed treatment for solid tumors with MAPK pathway activation: a phase I study of paclitaxel and bortezomib using an adaptive dose-finding approach. *Mol Cancer Ther.* 2011 Aug;10(8):1509-19. PubMed PMID: 21680752; NIHMSID: NIHMS305287; PubMed Central PMCID: PMC3155243

Complete List of Published Work:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/47732256/?sort=date&direction=ascending>

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