

## SHU-FEI LIN

PO Box 208048 (203) 737-1779 [shu-fei.lin@yale.edu](mailto:shu-fei.lin@yale.edu)

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### Professional Summary

- Significant research experiences in plant physiology, cancer research, and PET imaging using biochemical, molecular methodologies, and compartmental modeling analysis including:
  - Genomic survey technologies, such as microarray, cDNA-AFLP, and cDNA library construct...etc.
  - DNA, RNA and protein extraction/ isolation/ hybridization techniques from tissues, e.g. PCR, RT-PCR, Southern analysis, Northern analysis, SDS-PAGE, Western analysis...etc.
  - Cloning recombinant DNA
  - Chemiluminescence and autoradiographic assays
  - Bacteria/ plant transformation and mammalian cell transfection techniques
  - Knockdown assays (siRNA) and overexpression analyses
  - Optical and confocal fluorescent microscopies
  - Enzymes kinetics assays and toxicological analysis
  - HPLC, GC, Atomic Absorption Spectrometer, LC-MS and GC-MS operating techniques
- Substantial experience in managing grant-funded research and in developing new funding proposals by performing literature review and summarizing research progress
- Adeptness in drafting research papers of reports for presentation and/or for publication
- Advanced supervisory and interpersonal skills of managing part-time/ full-time scientists with bachelor's or master's degree
- Expertise in statistical analysis, mainly applying SAS, SigmaPlot, Origin and Excel
- Strong computer skills using a variety of software, e.g. SSH, Microsoft Word, PowerPoint, Adobe Photoshop, EndNote
- Comprehensive knowledge of research methodology and governmental (FDA) policies pertaining to research studies involving human subjects
- Experience in teaching undergraduate and graduate courses

### Employment history

**Associate Research Scientist**, 07/2010 – present Yale University *New Haven, CT. USA*  
Supervising, trouble-shooting and methodology developing of the measurements of “input function” required for kinetic analysis and image quantization and investigating *in vivo* or *in vitro* ligand-binding characteristics of a variety of potential biomarkers targeting cancer cells or CNS receptors

**Postdoctoral Associate**, 11/2007 – 06/2010 Yale University *New Haven, CT. USA*  
Supervising and trouble-shooting “input function” related analyses for PET studies conducted at Yale PET center

**Postdoctoral Research Fellow**, 8/2005 – 10/2007 University of Maryland *MD. USA*  
Participated in laboratory works and teaching graduate course including “Genomics”  
Coordinate and participate in the experiments, data collection and analysis of biomedical research projects  
Conduct grant applications and research reports for biochemical research (remote project)

**Research/Teaching Assistant**, 10/2000 – 6/2005 University of Maryland *College Park, MD.*  
Performed independent research and analysis for gene expression studies  
Participated in teaching courses including “[Introduction to Horticulture](#)” and “[Technology of Fruit and Vegetable Crop Production](#)”

**Image Processor**, 4/2000 – 12/2001 Johns Hopkins Hospital *Baltimore, MD. USA*  
Responsible for analyzing human's and baboon's brain images obtained by PET scans

**Research Associate/ Administrative Assistant**, 7/1998 – 6/1999 National Taiwan University  
*Taipei. Taiwan*

Responsible for investigation on biochemical toxicology of Chinese herbal medicine  
Managed grant-funded research, human resources, and controlled the study operating expenses to approved budget

## Education

**Ph.D.**, 2005 University of Maryland College Park *College Park, MD. USA*  
Dissertation: Transcript Profiling as a Method to Study Fruit Maturation, Tree-ripening, and the Role of “Tree Factor” in ‘Gala’ and ‘Fuji’ Apples

**M.S.**, 1998 National Taiwan University *Taipei. Taiwan*  
Thesis: Trials on Reducing Nitrate Content and Increasing Beneficial Nutrients in Leafy Vegetables by Horticultural Measures

**B.S.**, 1996 National Taiwan University *Taipei. Taiwan*

## Recent Presentations & Publications (selected from 45 peer-reviewed publications)

1. Naganawa M, **Lin SF\***, Lim K, Labaree D, Ropchan J, Harris P, Huang Y, Ichise M, Carson RE, Cline GW. Evaluation of pancreatic VMAT2 binding with active and inactive enantiomers of <sup>18</sup>F-FP-DTBZ in baboons. *Nucl Med Biol.* 2016 43(12):743-751. \***Co-first author**
2. Finnema SJ, Nabulsi NB, Eid T, Detyniecki K, **Lin SF**, Chen MK, Dhaher R, Matuskey D, Baum E, *et al.* Imaging synaptic density in the living human brain. *Sci Transl Med.* 2016. 8(348):348ra96.
3. Wu J, **Lin SF**, Gallezot JD, Chan C, Prasad R, Thorn SL, Stacy MR, Huang Y, Zonouz TH, Liu YH, *et al.* Quantitative Analysis of Dynamic <sup>123</sup>I-mIBG SPECT Imaging Data in Healthy Humans with a Population-Based Metabolite Correction Method. *J Nucl Med.* 2016. 57(8):1226-32.
4. Zheng MQ, **Lin SF\***, Holden D, Naganawa M, Ropchan JR, Najafzaden S, Kapinos M, Tabriz M, Carson RE, Hamill TG, Huang Y. Comparative evaluation of two glycine transporter 1 radiotracers <sup>11</sup>C-GSK931145 and <sup>18</sup>F-MK-6577 in baboons. *Synapse.* 2015. 70(3):112-20. \***Co-first & corresponding author**
5. **Lin SF\***, Labaree D, Chen MK, Holden D, Gallezot JD, Kapinos M, Teng JK, Najafzadeh S, Plisson C, Rabiner EA, Gunn RN, Carson RE, Huang Y. Further evaluation of <sup>11</sup>C-MP-10 as a radiotracer for phosphodiesterase 10A: PET imaging study in rhesus monkeys and brain tissue metabolite analysis. *Synapse.* 2015. 69(2):86-95. \***Corresponding author**
6. Sandiego CM, Nabulsi N, **Lin SF**, Labaree D, Najafzadeh S, Huang Y, Cosgrove K, Carson RE. Studies of the metabotropic glutamate receptor 5 radioligand <sup>11</sup>C-ABP688 with N-acetylcysteine challenge in rhesus monkeys. *Synapse.* 2013. 67(8):489-501.
7. **Lin SF**, Fan X, Yeckel CW, Weinzimmer D, Mulnix T, Gallezot JD, Carson RE, Sherwin RS, Ding YS. *Ex vivo* and *in vivo* evaluation of the norepinephrine transporter ligand <sup>11</sup>C-MRB for brown adipose tissue imaging. *Nucl Med Biol.* 2012. 39(7):1081-6.
8. **Lin SF**, Wei H, Maeder D, Franklin RB, Feng P. Profiling of zinc-altered gene expression in human prostate normal vs. cancer cells: a time course study. *J Nutr Biochem.* 2009. 20(12):1000-12.
9. Wei H, Desouki MM, **Lin SF**, Xiao D, Franklin RB, Feng P. Differential expression of metallothioneins (MTs) 1, 2, and 3 in response to zinc treatment in human prostate normal and malignant cells and tissues. *Mol Cancer.* 2008. 21:7:7. doi: 10.1186/1476-4598-7-7.
10. **Lin, SF\***, and C.S. Walsh. Studies of the “Tree Factor” and its role in the maturation and ripening of ‘Gala’ and ‘Fuji’ apples. *Postharvest Biol. and Tech.* 2008. 99–106. \***Corresponding author**
11. **Lin, SF**, G.D. Coleman, C.M. Parmentier-Line, and C.S. Walsh. Profiling the Mechanism of Transition from Maturation to Ripening of ‘Gala’ and ‘Fuji’ Apples (Oral Contribution). The 2nd International Rosaceae. *Genome Mapping Conference*, 2004.
12. **Lin, SF**, and C.S. Walsh. Studies of the “Tree Factor” and its Role in the Maturation and Ripening of ‘Gala’ and ‘Fuji’ Apples (Oral presentation). The 100<sup>th</sup> American Society for Horticultural Science Annual Meeting, 2003. *HortScience.* 38(5): 799.

## Extracurricular activities

**Elected Director/ Voted President of Student Society for Horticultural Science and Stock Market Research Society** 8/1993 – 5/1995 National Taiwan University *Taipei. Taiwan*  
Organized a series of activities to provoke horticultural sciences to public, coordinated researches of technical and industrial analyses on the Taiwanese stock market, directed several nation-wide annual meetings for the financial environment and reality.

## Personality

Organized, independent, confident, self-motivated, and detail oriented