
BIOGRAPHICAL SKETCH

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| NAME in English Szecheng J. Lo | POSITION TITLE Professor, Department and Graduate Institute of Biomedical Sciences |
| NAME in Chinese 羅時成 | |

EDUCATION/TRAINING

| INSTITUTION AND LOCATION | DEGREE (if applicable) | MM/YY | FIELD OF STUDY |
|----------------------------------------------|---------------------------|-------|--------------------|
| National Taiwan Normal University | B.S. | 06/70 | Biology, Zoology |
| University of Wisconsin--Superior | M.S.T. | 06/74 | Biology, Education |
| Wayne State University (Biological Sciences) | Ph.D. | 08/79 | Cell Biology |
| Wayne State University (Chemistry) | postdoc | 07/80 | Biochemistry |

A. Positions and Honors

Positions and Employment

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|----------------|-------------------------------------------------------------------------------------------------------------------|
| 1970-71, 72-73 | Biology Teacher, Ming-Chun Junior High School (Taipei) |
| 1980-1986 | Associate Professor, Department of General Study, Immunology and Microbiology, National Yang Ming Medical College |
| 1986-2003 | Professor, Immunology and Microbiology, National Yang Ming University |
| 1988-1991 | Chairman, Immunology and Microbiology, National Yang Ming University |
| 1998-2001 | Chairman, R&D, National Yang Ming University |
| 2001-2003 | Dean, Student Affair, National Yang Ming University |
| 2003-present | Professor, Department of Life Science (Biomedical Science since 2010), Chang Gung University |

Other Experience and Professional Memberships

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|-------|--------------------------------------------------------------------|
| 1980- | Member, The American Society for Cell Biology (ASCB) |
| 1985- | Member, The American Society of Microbiology (ASM) |
| 1990- | Member, American Association for the Advancement of Science (AAAS) |
| 1986- | Member, Society of Chinese Bioscientists in America (SCBA) |
| 1980- | Member, The Chinese Society of Biochemistry and Molecular Biology |
| 1985- | Member, The Chinese Society of Cell and Molecular Biology |
| 2010- | Manager Editor, <i>Frontiers of Biosciences</i> |

HONORS AND AWARDS

1. The Tsing-Ling Medical Foundation Research Chair Award (1986)
2. The Excellent Research Award of National Science Council (1986-1990)
3. The Best Teacher Award by Ministry of Education (1990, 1993)
4. The Outstanding Research Award of NSC (1991-1992, 1993-1994)
5. The award of the Best 10 Popular Science Book (The Story of Snake Venom Research in Taiwan, CO-AUTHOR WITH YU-LING YANG), 1996.
6. The award of the Best 10 Popular Science Book (Hepatitis B Combat in Taiwan, CO-AUTHOR WITH YU-LING YANG), 1999.
7. The Research Award of NSC (1995-2002)
8. The Golden Leaf Award for Hepatitis B Combat in Taiwan (Nov., 2002)

B. Selected Peer-reviewed Publications (2005-2010) (in chronological order)

1. Lo SJ, Chang HH. (2005) Recombinant snake disintegrins used for mammalian integrin study. *J. Toxic. Toxin Rev.* **24**: 1-16.
2. Sun DS, Lo SJ, Lin CH, Yu MS, Huang CY, Chen YF, Chang HH. (2005). Calcium oscillation and phosphatidylinositol 3-kinase positively-regulate integrin α IIb β 3-mediated outside-in signaling. *J. Biomed. Sci.* **12**: 321-333
3. Lai HJ, Lo SJ (2005) Epigenetic methylation of TIMP-3 may play a role in HBV-associated hepatocellular carcinoma. *Chang Gung M. J.* **28**: 453-455.
4. Chang JC, Chang HH, Lin CT, Lo SJ. (2005) The integrin α 6 β 1 modulation of PI3K and Cdc42 activities induces dynamic filopodium formation in human platelets. *J Biomed Sci.* **12**: 881-898.
5. Sun DS, Lo SJ, Tsai WJ, Lin CH, Yu MS, Chen FY, Chang HH. (2005) PI3-kinase is essential for ADP-stimulated integrin α IIb β 3-mediated platelet calcium oscillation, implications for P2Y receptor pathways in integrin α IIb β 3-initiated signaling cross-talks. *J Biomed Sci.* **12**:937-948.
6. Hsieh Yh, Liu Hp, Lo SJ, Cheng YS. (2006) Tumor Regression by Expression of High Physiological Levels of EBV Latent Membrane Protein 1. *Cancer Biol Ther.* **5 (3)**: 310-317.
7. Huang IC, Chien CY, Huang CR, Lo SJ. (2006) Induction of HDV large antigen translocation to the cytoplasm by HBV surface antigens correlates with ER-stress and NF-kB. *J. Gen. Virol.* **87**:1715-1723
8. Lo SJ, Lee CC, Lai HJ. (2006). The nucleolus: reviewing the oldies to have new understandings. *Cell Res* **16**(6):530-538. (invited review)
9. Hsin-Hou Chang and Szecheng J. Lo. (2007). Rhodostomin, a snake venom disintegrin, served as a molecular tool to dissect the integrin function. *Toxin Reviews* **26**: 189-202.
10. Willis Liou, Yen-Jen Sung, Mi-Hwa Tao, Szecheng J. Lo. (2008). Morphogenesis of the hepatitis B virion and subviral Particles in the liver of transgenic mice. *J Biomed Sci.* **15**: 311-316.
11. Yi YH, Ho PY, Chen TW, Lin WJ, Gukassyan V, Tsai TH, Wang DW, Lew TS, Tang CY, Lo SJ, Chen TY, Kao FJ, Lin CH. (2009) Membrane targeting and coupling of NHE1-integrin α IIb β 3-NCX1 by lipid rafts following integrin-ligand interactions trigger Ca^{2+} oscillation. *J. Biol. Chem.* **284**(6): 3855-3864.
12. Pi H, Lee LW, Lo SJ. (2009) New insights into polycistronic transcripts in eukaryotes. *Chang Gung Med J.* **32**(5):494-498.
13. Chen CY, Shiu JH, Hsieh YH, Liu YC, Chen YC, Chen YC, Jeng WY, Tang MJ, Lo SJ, Chaung WJ. (2009) Effect of D To E mutation of the RGD motif in rhodostomin on its activity, structure, and dynamics: Importance of the interactions between the D residue and integrin. *Proteins: Stru. Func Gen* **76**(4): 808-821
14. Wang YC, Huang CR, Chao M, Lo SJ (2009). The C-terminal sequence of the large hepatitis delta antigen is variable but retains the ability to bind clathrin. *Virology J.* **6**:31-41.
15. Lai HJ, Lo SJ, Kage-Nakadai E, Mitani S, Xue D. (2009). The roles and acting mechanism of *Caenorhabditis elegans* DNase II genes in apoptotic DNA degradation and development. *PLoS One* **4**(10): e7348.
16. Huang CR, Lo SJ (2010). Evolution and diversity of the human hepatitis D virus genome. *Adv Bioinformatics* **2010**:ID 323654. doi:10.1155/2010/323654.
17. Lee LW, Lo HW, Lo SJ (2010). Vectors for co-expression of two genes in *Caenorhabditis elegans*. *Gene* **455**: 16-21.
18. Lee LW, Chang TY, Lo HW, Lo SJ (2010) Hepatitis D antigens cause growth retardation and brood-size reduction in *C. elegans*. *Frontiers in Biosciences* (in press)

C. Research Support

Ongoing Research Support

National Science Council Grant (NSC 97-2320-B-182-002-MY3) 08/01/2008-07/31/2011

Effects of HBV and HDV antigens on the development of *C. elegans*.

The goal of this study is to establish a model to understand the viral antigens interacting molecules, either protein or nucleic acid, which may be associated with viral pathogenesis.

Role: PI

National Science Council Grant (PA9902-1961)

01/01/2010-12/31/2012

Continuation and Improvement of the *C. elegans* Core Facility

The goal of this study is to establish a transgenic worm core by the bombardment method.

Role: Co-Investigator, PI: Yi-Chun Wu (National Taiwan University)

National Science Council Grant (PF9801-1616)

01/01/2008-12/31/2010

Research experience for science teacher--*Caenorhabditis elegans* model

Goal: To share the research experience of *C. elegans* to high school biology teachers and their students and help to conduct worm experiment for science exhibition.

Role: PI.

Chang Gung Memorial Hospital Grant (CMRP)

12/01/2009-11/39/2012

Roles of three DNase II genes in the development of *Caenorhabditis elegans*

The goal of this project is to create an integrated database of demographic, social and biomedical information for homeless opiate abusers in two urban Missouri locations, using a number of state and local data sources.

Completed Research Support (2006-2010)

Chang Gung Memorial Hospital Grant (CMRP)

01/01/2007-12/31/2009

Biosynthesis control of nucleolus in *Caenorhabditis elegans*

Goal: to study the nucleolus-size control gene (*ncl-1*) and nucleolar protein (DAO-5).

Role: PI

National Science Council Grant (PF9808-0391)

05/01/2008-3/31/2009

Promotion of Popular Science in Taiwan

Goal: to compose the major contribution and influence to Taiwan science community by Science Monthly and to held conference and publish articles.

Role: PI

National Health Research Institute Grant (PG9705-0153)

01/01/2006-06/30/2008

Pathogenesis Correlation with the Replication of HDV

Role: PI.

National Science Council Grant (PC9607-0303)

08/01/2007-07/31/2008

Establishment of hepatitis viral gene expression in *Caenorhabditis elegans*

Goal: to establish the model organism to study the effect of hepatitis viral genes

Role:PI.

National Science Council Grant (PC9408-1375)

08/01/2004-07/31/2006

Factors of HDV antigens' translocation

Goal: to determine those factors can influence the HDV antigen translocation from the nucleus to cytoplasm

Role: PI.