

# Jue-Liang Hsu (徐睿良)

1, Hseuh Fu Rd., Neipu, Pingtung 91201, Taiwan / Department of Biological Science and  
Technology, NPUST

E-mail: [jlhsu@mail.npust.edu.tw](mailto:jlhsu@mail.npust.edu.tw)

Tel : (O) 08-7703202 Ext 5197 ; Fax : 08-7740550



## Birth

1972 in Kaohsiung, Taiwan

## Education

**B.S.** in 1995, Chemistry Department, National Chung-Hsing University

**M.S.** in 1997, Chemistry Department, National Taiwan University

**Ph.D.** in 2001, Chemistry Department, National Taiwan University

## Experience

1. **Teaching assistant** in National Taiwan University (1997-1998)
2. **Postdoctoral associate** in National Cheng-Kung University (2001~2005)
3. **R&D manager** in Life Science Dept. in ProSys Technology integration, Inc. (2005 ~2007)
4. **R&D manager** in Life Science BU in C SUN MFG. LTD. (2007~2009)
5. **Assistant professor** in Graduate Institute of Biotechnology in National Pingtung University of Science and Technology (2009 ~ 2011)
6. **Assistant professor** in Department of Biological Science and Technology in National Pingtung University of Science and Technology (2011 ~2013 )
7. **Associate professor** in Department of Biological Science and Technology in National Pingtung University of Science and Technology (2013 ~2017)
8. **Professor** in Department of Biological Science and Technology in National Pingtung University of Science and Technology (2017 ~)

## Research Interests

- 活性胜肽篩選
- 機能性天然物
- 蛋白質轉譯後修飾
- 脂質體學
- 膜蛋白質體學

## Honor

1. **Young Scientist Award** (*HUPO* 3<sup>rd</sup> Annual World Congress, **2004**). (*HUPO*: **H**uman **P**roteome **O**rganization).

2. 國立屏東科技大學『2014年科技部特殊優秀人才獎勵』。
3. 國立屏東科技大學『2014年度教師研發成果競賽』特優作品獎。
4. 國立屏東科技大學『103學年度農學院教學績優教師』。
5. 國立屏東科技大學『103學年度農學院優良導師』。
6. 『教育部2014台北國際發明暨技術交易展』參展，參展作品『從鰵卵蛋白篩選並製備具降血壓活性之新穎胜肽』。
7. 國立屏東科技大學『2015年科技部特殊優秀人才獎勵』。
8. 國立屏東科技大學『2016年科技部特殊優秀人才獎勵』。
9. 『科技部2016台北國際發明暨技術交易展』參展，參展作品『一種篩選自苦瓜籽蛋白之具降血壓活性胜肽及其製備方法』。
10. 國立屏東科技大學『105學年度農學院優良導師』。
11. 國立屏東科技大學『2017年科技部特殊優秀人才獎勵』。

## Publications

### A. Paper (\* corresponding author)

1. Seto Windarto\*, Happy Nursyam, **Jue-Liang Hsu**, Meng-Chou Lee. Antioxidant Activity of Protein Fractions Derived from *Acrochaetium* sp. (Rhodophyta) Enzymatic Hydrolysates. *Journal of Life Science and Biomedicine* **2018**, 8(1), 10-18.
2. Yung-Che Kuo, Heng-Kien Au, **Jue-Liang Hsu**, Hsiao-Feng Wang, Chiung-Ju Lee, Syue-Wei Peng, Ssu-Chuan Lai, Yu-Chih Wu, Hong-Nerng Ho, and Yen-Hua Huang\*. IGF-1R Promotes Symmetric Self-Renewal and Migration of Alkaline Phosphatase<sup>+</sup> Germ Stem Cells through HIF-2 $\alpha$ -OCT4/CXCR4 Loop under Hypoxia. *Stem Cell Reports* **2018**, 10, 10-14.
3. Nur Maulida Safitri\*, Endang Yuli Herawati, **Jue-Liang Hsu**\*. Antioxidant Activity of Purified Active Peptide Derived from *Spirulina platensis* Enzymatic Hydrolysates. *Research Journal of Life Science* **2017**, 4(2), 119-128.
4. Hui-Chuan Yu, **Jue-Liang Hsu**, Chi-I. Chang, and Fa-Jui Tan\*. Antioxidant properties of porcine liver proteins hydrolyzed using *Monascus purpureus*. *Food Science and Biotechnology* **2017**, 26(5), 1217–1225.
5. Chi-I Chang, Wei-Chu Chien, Kai-Xin Huang, and **Jue-Liang Hsu**\*. Anti-inflammatory effects of vitisinol A and four other oligostilbenes from *Ampelopsis brevipedunculata* var. *Hancei*. *Molecules* **2017**, 22(7), 1195. doi:10.3390/molecules22071195 (**MOST 105-2113-M-020-001** and **NSC 99-2313-B-020-004-MY3**) (SCI, citation = 0)
6. Chiy-Rong Chen, Yun-Wen Liao, Yueh-Hsiung Kuo, **Jue-Liang Hsu**, and Chi-I Chang\*. New Norcucurbitane Triterpenoids from *Momordica charantia* var. *abbreviata*. *Natural Product Communications*, **2017**, 12(7), 1013–1016. (SCI, citation = 0)
7. Wei-Ru Huang, Pei-I Chi, Hung-Chuan Chiu, **Jue-Liang Hsu**, Brent L. Nielsen, Tsai-Ling Liao & Hung-Jen Liu\*. Avian reovirus p17 and  $\sigma$ A act cooperatively to

- downregulate Akt by suppressing mTORC2 and CDK2/cyclin A2 and upregulating proteasome PSMB6. *Scientific Reports* **2017**, 7: 5226 | DOI:10.1038/s41598-017-05510-x. (SCI, citation = 0)
8. Chiy-Rong Chen, Yun-Wen Liao, Yueh-Hsiung Kuo, **Jue-Liang Hsu**, and Chi-I Chang\*. Cucurbitane-Type Triterpenoids from *Momordica charantia*. *Natural Product Communications*, **2017**, 12(6), 889–892. (SCI, citation = 0)
  9. Dwi Yuli Pujiastuti, Ya-Hui Shih, Wei-Lin Chen, Sukoso, and **Jue-Liang Hsu**\*. Screening of angiotensin-I converting enzyme inhibitory peptides derived from soft-shelled turtle yolk using two orthogonal bioassay-guided fractionations. *Journal of Functional Foods* **2017**, 28, 36–47. (MOST 104-2113-M-020-001) (SCI, citation = 0)
  10. Ching-Dong Chang, Ping-Yuan Lin, **Jue-Liang Hsu** and Wen-Ling Shih\*. Ursolic acid Suppresses Hepatitis B Virus X Protein-mediated Autophagy and Chemotherapeutic Drugs Resistance. *Anticancer Research* **2016**, 36, 5097–5108. (SCI, citation = 0)
  11. Teeradate Kongpichitchoke, Ming-Tzu Chiu, Tzou-Chi Huang, and **Jue-Liang Hsu**\*. Gallic acid content in Taiwanese teas at different fermentation degree and its antioxidant activity by inhibiting PKC- $\delta$  activation: *In-vitro* and *in-silico* studies. *Molecules* **2016**, 21, 1346. (doi:10.3390/molecules21101346) (SCI, citation = 1)
  12. **Jue-Liang Hsu**\* and Shu-Hui Chen\*. Stable isotope dimethyl labeling for quantitative proteomics and beyond. *Philosophical Transactions of the Royal Society A (PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES)*, **2016**, 374, 20150364. (MOST 104-2113-M-020-001) (SCI, citation = 0)
  13. Chiu-Ping Kuo, Kuo-Song Chang, **Jue-Liang Hsu**, I-Fang Tsai, Andrew Boyd Lin, Tsai-Yin Wei, Chien-Liang Wu and Yen-Ta Lu\*. Analysis of the immune response of human dendritic cells to *Mycobacterium tuberculosis* by quantitative proteomics. *Proteome Science* **2016**, 14:5. (Mar 8, 2016 doi: 10.1186/s12953-016-0095-8) (SCI, citation = 0)
  14. Ho-Shin Huang, **Jue-Liang Hsu**, Chin-Chuan Yu, Lai-Chuan Chang, Chiy-Rong Chen, Tzou-Chi Huang, Chi-I Chang\*. Qualitative and quantitative analysis of seven signature components in the fruiting body of *Antrodia cinnamomea* by HPLC-ESI/MS/MS. *Acta Chromatographica*. **2016**, 28(3), 387–402. (DOI: 10.1556/1326.2016.28.3.9) (SCI, citation = 0)
  15. Reynetha D. S. Rawendra, Ping-Yuan Lin, Ching-Dong Chang, **Jue-Liang Hsu**, Tzou-Chi Huang, and Wen-Ling Shih\*. Potentiation of acute promyelocytic leukemia cells differentiation and prevention of leukemia development in mice by oleanolic acid. *Anticancer Research* **2015**, 35 (12), 6583-6590.
  16. Anugerah Dany Priyanto, Robert J. Doerksen, Chi-I Chang, Wang-Chou Sung, Simon Bambang Widjanarko, Joni Kusnadi, Ya-Chi Lin, Ting-Chin Wang, and **Jue-Liang Hsu**\*. Screening, discovery, and characterization of angiotensin-I converting enzyme inhibitory

- peptides derived from proteolytic hydrolysate of bitter melon seed proteins. *Journal of Proteomics* **2015**, *128*, 424-435. (MOST 104-2113-M-020-001) (SCI, citation = 3)
17. Anugerah Dany Priyanto, Robert J. Doerksen, Chi-I Chang, Wang-Chou Sung, Simon Bambang Widjanarko, Joni Kusnadi, Ya-Chi Lin, Ting-Chin Wang, and Jue-Liang Hsu\*. Data in support of optimized production of angiotensin-I converting enzyme inhibitory peptides derived from proteolytic hydrolysate of bitter melon seed proteins. *Data in Brief* **2015**, 403-407. (MOST 104-2113-M-020-001)
  18. Teeradate Kongpichitchoke, Jue-Liang Hsu, Tzou-Chi Huang. Effect of Drying Process on the Production of 5-hydroxymethylfurfural in *Citrofortunella microcarpa* at Two Different Maturity Stages. *Journal of International Cooperation*, **2015**, *10*, 55-70.
  19. Teeradate Kongpichitchoke, Jue-Liang Hsu, and Tzou-Chi Huang\*. Number of Hydroxyl Group on the B-ring of Flavonoids Affects Their Antioxidant Activity and Interaction with Phorbol Ester Binding Site of PKC $\delta$  C1B Domain: In-vitro and In-silico Study. *Journal of Agricultural and Food Chemistry*, **2015**, *63*, 4580-4586.
  20. Pei-Shiuan Su, Robert J. Doerksen, Sin-Hong Chen, Wang-Chou Sung, Chia-Chi Juan, Reynetha D.S. Rawendra, Chiy-Rong Chen, Jia-Wei Li, Aisha, Tzou-Chi Huang, Ming-Huei Liao, Chi-I Chang \* and Jue-Liang Hsu\*. Screening and Profiling Stilbene-type Natural Products with Angiotensin-Converting Enzyme Inhibitory Activity from *Ampelopsis brevipedunculata* var. *hancei* (Planch.) Rehder. *Journal of Pharmaceutical and Biomedical Analysis*, **2015**, *108*, 70-77. (NSC 102-2113-M-020-001-MY2 and NSC 102-2923-B-020-001-MY2) (SCI, citation = 4)
  21. Wen-Jen Chung, Chi-Lung Huang, Hong-Yi Gong, Tsung-Yin Ou, Jue-Liang Hsu, Shao-Yang Hu\*. Recombinant production of biologically active giant grouper (*Epinephelus lanceolatus*) growth hormone from inclusion bodies of *Escherichia coli* by fed-batch culture. *Protein Expression and Purification*, **2015**, *110*, 79–88.
  22. Cheng Liu, Jen-Jie Lin, Zih-Yan Yang, Chi-Chu Tsai, Jue-Liang Hsu\* and Yu-Jen Wu\*. A proteomic study reveals a co-occurrence of gallic acid-induced apoptosis and glycolysis in B16F10 melanoma cells. *Journal of Agricultural and Food Chemistry*, **2014**, *62*, 11672–11680. (NSC 102-2113-M-020-001-MY2) (SCI, citation = 4)
  23. Reynetha D.S. Rawendra, Aisha, Sin-Hong Chen, Chi-I Chang, Wen-Ling Shih, Tzou-Chi Huang, Ming-Huei Liao, and Jue-Liang Hsu\*. Isolation and characterization of a novel ACE-inhibitory tripeptide from enzymatic hydrolysis of soft-shelled turtle (*Pelodiscus sinensis*) egg white: an in-vitro, in-vivo and in-silico study. *Journal of Agricultural and Food Chemistry*, **2014**, *62*, 12178-12185. (NSC 102-2113-M-020-001-MY2) (SCI, citation = 5)
  24. Chih-Ming Lu, Jen-Jie Lin, Han-Hsiang Huang, Ying-Chin Ko, Jue-Liang Hsu, Jiing-Chuan Chen, Zhong-Hao Din, Yu-Jen Wu. A panel of tumor markers, calreticulin, annexin A2, and annexin A3 in upper tract urothelial carcinoma identified by proteomic and immunological analysis. *BMC Cancer*, **2014**, *14*: 363.

25. Reynetha D.S. Rawendra, Aisha, Chi-I Chang, Aulanni'am, Ho-Hsien Chen, Tzou-Chi Huang,\* and **Jue-Liang Hsu**.\* A novel angiotensin converting enzyme inhibitory peptide derived from proteolytic digest of Chinese soft-shelled turtle egg white proteins. *Journal of Proteomics*, **2013**, *94*, 359-369. (NSC 102-2113-M-020-001-MY2) (SCI, citation = 13)
26. Sin-Hong Chen, Chiy-Rong Chen, Shu-Hui Chen, Ding-Tzai Li, and **Jue-Liang Hsu**.\* Improved N<sup>α</sup>-acetylated Peptide Enrichment Following Dimethyl Labeling and SCX. *Journal of Proteome Research* **2013**, *12*, 3277–3287. (NSC 100-2113-M-020-001-MY2) (SCI, citation = 14)
27. Ching-Dong Chang, Ping-Yuan Lin, Ming-Huei Liao, Chi-I Chang, **Jue-Liang Hsu**, Feng-Ling Yu, Hung-Yi Wu, Wen-Ling Shih.\* Suppression of Apoptosis by Pseudorabies Virus Us3 Protein Kinase through the Activation of PI3-K/Akt and NF-κB Pathways. *Research in Veterinary Science*, **2013**, *95*, 764-774.
28. Chung-Yi Lo, Hsueh-Ling Cheng, **Jue-Liang Hsu**, Ming-Hui Liao, Rong-Lang Yen, and Yo-Chia Chen. The antimicrobial activities of phenylbutyrates against *Helicobacter pylori*. *Chemical & Pharmaceutical Bulletin*, **2013**, *61*, 604-610.
29. Phornsinee Sakchareonkeat, Tzou-Chi Huang, Prisana Suwannaporn, Yu-Hsuan Chiang, **Jue-Liang Hsu** and Yong-Han Hong. Encapsulation efficiency of coenzyme Q10-liposomes in alginate. *Nutrition & Food Science*, **2013**, *43*, 150-160.
30. Yun-Wen Liao, Chiy-Rong Chen, **Jue-Liang Hsu**, Yun-Sheng Lin, Hsueh-Ling Cheng, Wen-Ling Shih, Yueh-Hsiung Kuo\* and Chi-I Chang,\* Norcucurbitane Triterpenoids from the Fruits of *Momordica charantia* var. abbreviate, *Natural Product Communications*, **2013**, *8*, 79-81.
31. Yun-Wen Liao (廖運文), Chiy-Rong Chen (陳芝融), Jiunn-Jye Chuu (褚俊傑), Hui-Chi Huang (黃慧琪), **Jue-Liang Hsu** (徐睿良), Tzou-Chi Huang (黃卓治), Yueh-Hsiung Kuo (郭悅雄),\* Chi-I Chang (張誌益)\*. Cucurbitane Triterpenoids from the Fruit Pulp of *Momordica charantia* and Their Cytotoxic Activity. *Journal of the Chinese Chemical Society, Taipei*, **2013**, *60*, 526-530.
32. **Jue-Liang Hsu**, Shu-Hui Chen\*. Stable-Isotope Dimethyl Labeling for Quantitative Proteomics (穩定同位素二甲基標示應用於定量蛋白質體學). *Research Express@NCKU* (成大研發快訊), **2012**, *21*, issue 8, 1-5. (<http://research.ncku.edu.tw/re/articles/e/20120309/3.html>)
33. Yun-Wen Liao, Chiy-Rong Chen, Yueh-Hsiung Kuo, **Jue-Liang Hsu**, Wen-Ling Shih, Hsueh-Ling Cheng, Tzou-Chi Huang, and Chi-I Chang. Cucurbitane-Type Triterpenoids from the Fruit Pulp of *Momordica charantia*. *Natural Product Communications*, **2012**, *7*, 1575–1578.
34. Chia-Hao Yeh, Shu-Hui Chen, Ding-Tzai Li, Hong-Ping Lin, Hung-Jen Huang, Chi-I Chang, Wen-Ling Shih, Chi-Liang Chern, Fong-Ku Shi, and **Jue-Liang Hsu**\*, “Magnetic Bead-based Hydrophilic Interaction Liquid Chromatography for Glycopeptide Enrichments”. *Journal of Chromatography A*, **2012**, *1224*, 70-78. (NSC 98-2113-M-020

**-002 -MY2)** (SCI, citation = 34)

35. Chung-Yi Chen, Shuenn-Jiun Yiin, **Jue-Liang Hsu**, Wei-Che Wang, Shan-Chun Lin, and Chi-Liang Chern. "Isoobtusilactone A Sensitizes Human Hepatoma Hep G2 Cells to TRAIL-Induced Apoptosis via ROS and CHOP-Mediated Up-regulation of DR5". *J. Agric. Food Chem.* **2012**, *60*, 3533-3539.
36. Ing-Feng Chang\*, **Jue-Liang Hsu**, Pang-Hung Hsu, Wei-An Sheng, Shiuan-Jeng Lai, Cindy Lee, Chun-Wei Chen, Jen-Chieh Hsu, Shu-Ying Wang, Lan-Yu Wang, Ching-Chuan Chen. "Comparative phosphoproteomic analysis of microsomal fractions of Arabidopsis thaliana and Oryza sativa subjected to high salinity". *Plant Science*, **2012**, *185-186*, 131-142. **(NSC 98-2113-M-020 -002 -MY2)** (SCI, citation = 12)
37. Chun-Hung Liu, Ya-Li Shiu, **Jue-Liang Hsu**. "Purification and characterization of trypsin from the pyloric ceca of orange-spotted grouper, *Epinephelus coioides*", *Fish Physiology and Biochemistry*, **2012**, *38*, 837-848.
38. Yu-Hsuan Chiang, Yu-Jen Wu, Ya-Ting Lu, Kuan-Hung Chen, Tzu-Chun Lin, Yu-Kuang H. Chen, Ding-Tzai Li, Fong-Ku Shi, Ching-Chuan Chen and **Jue-Liang Hsu**\*. "Simple and specific dual-wavelength excitable dye staining for glycoprotein detection in polyacrylamide gels and its application in glycoproteomics", *Journal of Biomedicine and Biotechnology*, **2011**, Article ID 780108 (doi:10.1155/2011/780108) **(NSC 98-2113-M-020 -002 -MY2)** (SCI, citation = 3)
39. Hong-Yin Wu, Chi-I Chang, Bo-Wei Lin, Feng-Ling Yu, Ping-Yuan Lin, **Jue-Liang Hsu**, Chia-Hung Yen, Ming-Huei Liao, and Wen-Ling Shih\*. "Suppression of hepatitis B virus X protein-mediated tumorigenic effects by ursolic acid", *J. Agric. Food Chem.*, **2011**, *59*, 1713-1722.
40. Ping-Yuan Lin, Hung-Jen Liu, Ching-Dong Chang, Chi-I Chang, **Jue-Liang Hsu**, Ming-Huei Liao, Jeng-Woei Lee and Wen-Ling Shih\*. "Avian reovirus S1133-induced DNA damage signaling and subsequent apoptosis in cultured cells and in chickens", *Arch. Virol.* (Archives of Virology), **2011**, *156*, 1917-1929.
41. Yun-Wen Liao (廖運文), Chiy-Rong Chen (陳芝融), **Jue-Liang Hsu** (徐睿良), Hsueh-Ling Cheng (鄭雪玲), Wen-Ling Shih (施玟玲), Yueh-Hsiung Kuo (郭悅雄), Tzou-Chi Huang\* (黃卓治), Chi-I Chang\* (張誌益). "Sterols from the stems of *Momordica charantia*", *J. Chin. Chem. Soc., Taipei*, **2011**, *58*, 893-898.
42. Chih-Ming Lu, Yu-Jen Wu, Cheng-Chi Chen, **Jue-Liang Hsu**, Jing-Chuan Chen, Jeff Yi-Fu Chen, Chun-Hsiung Huang and Ying-Chin Ko\*. "Identification of low-abundance proteins via fractionation of the urine proteome with weak anion exchange chromatography", *Proteome Science* **2011**, *9*, 17.
43. Chun-Che Lin, **Jue-Liang Hsu**, Chin-Chung Tseng, and Gwo-Bin Lee\*. "An integrated microfluidic system for the determination of microalbuminuria by measuring the albumin-to-creatinine ratio" *Microfluid Nanofluid* (Microfluidics and Nanofluidics) **2011**, *10*, 1055-1067.

44. Feng-Lang Lin, **Jue-Liang Hsu**, Chang-Hung Chou, Wen-Jun Wu, Chi-I Chang\*, Hung-Jen Liu\*. "Activation of p38 MAPK by damnacanthal mediates apoptosis in SKHep 1 cells through the DR5/TRAIL and TNFR1/TNF- $\alpha$  and p53 pathways", *European Journal of Pharmacology* **2011**, 650, 120–129.
45. Chun-Che Lin, **Jue-Liang Hsu**, Gwo-Bin Lee\*. "Sample preconcentration in microfluidic devices", *Microfluid Nanofluid* **2011**, 10, 481–511.
46. Chin-Jen Wu, **Jue-Liang Hsu**, Sheng-Yu Huang, Shu-Hui Chen\*. "Mapping N-Terminus Phosphorylation Sites and Quantitation by Stable Isotope Dimethyl Labeling". *Journal of the American Society for Mass Spectrometry* **2010**, 21, 460–471.
47. Chun-Yen Chen, Chin-Yang Chang, Hung-Jen Liu, Ming-Huei Liao, Chi-I Chang, **Jue-Liang Hsu**, Wen-Ling Shih\*. "Apoptosis induction in BEFV-infected Vero and MDBK cells through Src-dependent JNK activation regulates caspase-3 and mitochondria pathways". *Veterinary Research*, **2010**, 41, 15.
48. Shu-Hui Chen, Yi-Wen Wang, **Jue-Liang Hsu**, Chi-Yun Wang, Po-Tsun Shen, Jing-Jing Chuang, Hung-Wen Tsai, Chi-Wu Chiang, Chung-Ta Lee, Fang-Chih Chang, Hsiao-Sheng Liu, Nan-Haw Chow\*. "Nucleophosmin in the Pathogenesis of Arsenic-related Bladder Carcinogenesis Revealed by Quantitative Proteomics". *Toxicology and Applied Pharmacology* **2010**, 242, 126–135. (SCI, citation = 13)
49. **Jue-Liang Hsu**, Lan-Yu Wang, Shu-Ying Wang, Ching-Huang Lin, Kuo-Chieh Ho, Fong-Ku Shi, Ing-Feng Chang\*. "Functional phosphoproteomic profiling of phosphorylation sites in membrane fractions of salt-stressed *Arabidopsis thaliana*". *Proteome Science*, **2009**, 7, 42. (NSC 98-2113-M-020 -002 -MY2) (SCI, citation = 32)
50. Sheng-Yu Huang\*, Chien-Hsien. Wen, Ding-Tzai Li, **Jue-Liang Hsu**, Chinpan. Chen, Fong-Ku Shi, and Yueh Yi Lin. "Assignment of Disulfide-Linked Peptides Using Automatic a1 Ion Recognition." *Analytical Chemistry* **2008**, 80, 9135-9140. (SCI, citation = 7)
51. Shu-Hui Chen\*, **Jue-Liang Hsu**, Fong-Sian Lin. "Fluorescein As a Versatile Tag for Enhanced Selectivity in Analyzing Cysteine-containing Proteins/Peptides Using Mass Spectrometry", *Analytical Chemistry* **2008**, 80, 5251-5259. (SCI, citation = 12)
52. Po-Tsun Shen, **Jue-Liang Hsu**, and Shu-Hui Chen\*. "Dimethyl Isotope-Coded Affinity Selection for the Analysis of Free and Blocked N-Termini of Proteins Using LC-MS/MS", *Analytical Chemistry* **2007**, 79, 9520-9530. (SCI, citation = 33)
53. **Jue-Liang Hsu** \*, Shu-Hui Chen, Ding-Tzai Li, and Fong-Ku Shi. "Enhanced a1 Fragmentation for Dimethylated Proteins and Its Applications for N-terminal Identification and Comparative Protein Quantitation", *J. Proteome Res.* **2007**, 6, 2376-2383. (SCI, citation = 15)
54. **Jue-Liang Hsu**, Sheng-Yu Huang, and Shu-Hui Chen\*. "Dimethyl Multiplexed Labeling Combined with Microcolumn Separation and MS Analysis for Time Course Study in Proteomics", *Electrophoresis* **2006**, 27, 3652-3660. (SCI, citation = 43)

55. Sheng-Yu Huang, Chin-Jen Wu, Mei-Ling Tsai, **Jue-Liang Hsu**, Shih-Hsin Ho, and Shu-Hui Chen\*. "Quantitative Analysis of Phosphoproteins of Late-gestation Rat Uteri Using Stable Isotope Labeling and Immobilized Metal Affinity Chromatography", *Proteomics* **2006**, *6*, 1722-1734. (SCI, citation = 41)
56. **Jue-Liang Hsu** and Shu-Hui Chen. "Recent Progress in Quantitative Proteomics Using Stable Isotope Labeling, Multidimensional Liquid Chromatography and Mass Spectrometry", *Current Proteomics* **2005**, *2*, 287-302. (SCI, citation = 1)
57. Sheng-Yu Huang, **Jue-Liang Hsu** and Shu-Hui Chen. "Two-step Immobilized Metal Affinity Chromatography (IMAC) for Phosphoproteomics Using Mass Spectrometry", *J. Chin. Chem. Soc., Taipei*, **2005**, *52*, 765-772. (SCI, citation = 4)
58. **Jue-Liang Hsu**, Sheng-Yu Huang, Jen-Taie Shiea, Wen-Ying Huang, and Shu-Hui Chen. "Beyond Quantitative Proteomics: Signal enhancement of the a<sub>1</sub> ion as a mass tag for peptide sequencing using dimethyl labeling", *J. Proteome Res.* **2005**, *4*, 101-108. (SCI, citation = 79)
59. **Jue-Liang Hsu**, Mong-Kuan Chou, Shih-Shin Liang, Shang-Yu Huang, Chin-Jen Wu, Fong-Ku Shi, Shu-Hui Chen, "Photopolymerized micro-tips for sample preparation in proteomic analysis" *Electrophoresis* **2004**, *25*, 3840-3847. (SCI, citation = 15)
60. Sheng-Yu Huang, **Jue-Liang Hsu**, Nicholas A. Morrice, Chin-Jen Wu and Shu-Hui Chen. "A convenient method to extract MALDI-MS spectra from phosphate-containing peptide mixtures" *Proteomics* **2004**, *4*, 1935-1938. (SCI, citation = 7)
61. **Jue-Liang Hsu**, Sheng-Yu Huang, Nan-Haw Chow and Shu-Hui Chen, "Stable-isotope dimethyl labeling for quantitative proteomics" *Analytical Chemistry* **2003**, *75*, 6843-6852. (SCI, citation = 414)
62. **Jue-Liang Hsu** and Shu-Hui Chen "Stable isotope labeling coupled with LC/MS technique for quantitative proteomics" (in Chinese), *CHEMISTRY* (The Chinese Chem.Soc, Taipei) , **2003**, *61*, 257-266.
63. Ming-Yi Chen, **Jue-Liang Hsu**, Jiun-Jie Shie and Jim-Min Fang. "Direct oxidative amidation of aldoses by iodine in ammonia water". *J. Chin. Chem. Soc., Taipei*, **2003**, *50*, 129-133. (SCI, citation = 6)
64. **Jue-Liang Hsu** and Jim-Min Fang, "Stereoselective synthesis of  $\delta$ -lactones from 5-oxoalkanals via one-pot sequential acetalization, Tishchenko reaction, and lactonization by cooperative catalysis of samarium ion and mercaptan". *J. Org. Chem.* **2001**, *66*, 8573-8584. (SCI, citation = 38)
65. Sanjay Talukdar, **Jue-Liang Hsu**, Tzu-Chi Chou and Jim-Min Fang. "Direct transformation of aldehydes to nitriles using iodine in ammonia water". *Tetrahedron Lett.* **2001**, *42*, 1103-1105. (SCI, citation = 85)
66. Jim-Min Fang, Ming-Yi Chen, Jiann-Shyng Shiue, Ling Lu and **Jue-Liang Hsu**. "Samarium diiodide-mediated asymmetric reactions of 8-phenylmenthyl esters". *Tetrahedron Lett.* **2000**, *41*, 4633-4636. (SCI, citation = 9)



67. **Jue-Liang Hsu**, Chao-Tsen Chen, and Jim-Min Fang. "Cooperative catalysis of samarium diiodide and mercaptan in a stereoselective one-pot transformation of 5-oxopentanal into delta-lactones". *Organic Lett.* **1999**, *1*, 1989-1991. (SCI, citation = 13)
68. Guo-Hsian Chen, **Jue-Liang Hsu**, Wen-Bin Yang, Jim-Min Fang, Gene-Hsiang Lee, Yi-Hung Liu, and Yu Wang. "Preparation of chiral phosphorus (V) reagents and their uses with borane in the enantioselective reduction of ketones". *J. Chin. Chem. Soc. Taipei*, **1999**, *46*, 797-810. (SCI, citation = 7)

## B. Patents and technology transfer

### 專利

1. "用於濃縮純化生化樣品之拋棄式吸管及其製造方法", Taiwan patent 200500272, 發明人：陳淑慧、周孟寬、**徐睿良**及石峰鵠。
2. "Reagent kit of global analysis for protein expression and method for qualitative and quantitative proteomic analysis using the same", Filed to USPTO with patent number 7338806 (USPTO), inventors : Shu-Hui Chen, **Jue-Liang Hsu**, Sheng-Yu Huang.
3. "廣泛型蛋白質質譜分析試劑組及使用該試劑組之蛋白質定性及定量方法" - Taiwan Patent 092126189, 發明人：陳淑慧、**徐睿良**及黃聖聿。
4. "用於鑑定蛋白質或胜肽 N 端胺基酸的套組及方法" - Taiwan Patent 097121520, 發明人：陳淑慧、沈伯村及**徐睿良**。
5. "鱉蛋胜肽之製備方法、其產物及其用於製備降血壓藥物之用途", 台灣專利 (專利號碼： I 477607, 專利期限：2015/3/21~2033/11/7), 發明人：**徐睿良**、張誌益及黃卓治。
6. "アンジオテンシン I 轉換酵素抑制と血圧低下に用いる短鎖活性ペプチド", 日本專利 (特許第 6018614 号, 專利期限：2014/11/7~2034/11/6), 發明人：**徐睿良**、張誌益及黃卓治。
7. "一種篩選自苦瓜籽蛋白之具降血壓活性胜肽及其製備方法", 台灣專利 (專利號碼： I 516273, 專利期限：2016/1/11~2034/11/23), 發明人：**徐睿良**、張誌益及黃卓治。
8. "甲魚養殖管理裝置及其方法 (DEVICE AND METHOD FOR CULTIVATION MANAGEMENT OF SOFT-SHELLED TURTLES)", 台灣專利 (專利號碼： I 621393, 專利期限：2018/4/21~ 2037/8/7), 發明人：陳灯能、**徐睿良**及陳英男。

### 技術移轉

1. 陳灯能、**徐睿良**及陳英男。甲魚養殖管理裝置及其方法。授權期間一年六個月 (2018/6~2019/12), 授權予栗場國際有限公司, 技轉金額總計新台幣伍拾萬元整, 簽約日期中華民國 107 年 6 月 21 日。
2. 張誌益、施玫玲、**徐睿良**、陳芝融。山苦瓜護肝萃取物製備。授權期間十年 (2017/8~2027/8), 授權予開物生醫有限公司, 技轉金額總計新台幣貳拾萬元整, 簽約日期中華民國 106 年 8 月 16 日。
3. 張誌益、施玫玲、**徐睿良**、陳芝融。山苦瓜預防 B 型肝炎萃取物製備。授權期間十

年 (2017/1~2027/12), 授權予芳盈生物科技股份有限公司, 技轉金額總計新台幣貳拾萬元整, 簽約日期中華民國 106 年 7 月 1 日。

4. 陳又嘉、徐睿良、陳琬婷。蔬果發酵菌株。授權期間十年 (2017/1~2027/12), 授權予楓荷生物科技股份有限公司, 技轉金額總計新台幣十萬元整, 簽約日期中華民國 106 年 1 月 1 日。
5. 張誌益、徐睿良、陳芝融。山葡萄葉降血壓活性成分分析。授權期間十年 (2013/12/1~2023/11/30), 授權予天擎生化科技股份有限公司, 技轉金額總計新台幣十二萬元整, 簽約日期中華民國 102 年 12 月 1 日。
6. 張誌益、陳芝融、徐睿良。牛樟芝成分分析。授權期間十年 (2012/12~2022/12), 授權予喬本生醫股份有限公司, 技轉金額總計新台幣十萬元整, 簽約日期中華民國 101 年 12 月 15 日。

### C. Posters

1. “Screening of Angiotensin-I Converting Enzyme Inhibitory Peptides Derived from *Dichotomaria marginata*” 發表於” 2017 年第十四屆台灣質譜學會年會 14th Annual Conference of the TSMS”, Seto Windarto and Jue-Liang Hsu\*(中興大學 2017/6/28-2017/6/30)。
2. “從南瓜籽蛋白水解物中篩選出具有降低血管收縮素轉換酶活性之胜肽” 發表於” 2017 年第十四屆台灣質譜學會年會 14th Annual Conference of the TSMS”, 陳牧凡、徐睿良\*(中興大學 2017/6/28-2017/6/30)。
3. “藻類抗發炎活性胜肽成分之篩選” 發表於” 2017 年第十四屆台灣質譜學會年會 14th Annual Conference of the TSMS ”, 黃凱昕、徐睿良\*(中興大學 2017/6/28-2017/6/30)。
4. “利用質譜分析技術自鱈蛋水解物中篩選具有抑制酪胺酸去磷酸酶之磷酸化胜肽” 發表於”2017 中國化學會年會”, 林欣儀、徐睿良\*(嘉義大學 2017/12/1-2017/12/2)。
5. “富含川陳皮素香檸檬醋飲之開發”發表於”2017 生技保健產品趨勢研討會暨海報競賽”, 陳信宏、李佳蕙、林欣儀、曾韻頤、蔡福良、徐睿良\*(南台科技大學 2017/10/26)([應用生技組\(II\)第一名](#))
6. “自小球藻蛋白水解物中篩選具抑制蛋白酪胺酸磷酸酶 1B 活性之胜肽” 發表於” 2017 生技保健產品趨勢研討會暨海報競賽”, 李佳蕙、陳曉艷、徐睿良\*(南台科技大學 2017/10/26)([應用生技組\(I\)第二名](#))
7. “利用蛋白質體分析方法自紫蘇子水解物中篩選出具有血管收縮素轉化酶抑制活性之胜肽” 發表於 “2016 【台灣檢驗及品保學會】第二屆第二次年會暨食品衛生安全檢測及保健食品原料的應用”by 洪祥貴(Xiang-Gui Hong)及徐睿良(Jue-Liang Hsu)(NTU, Taipei, Taiwan)(Oct 1, 2016)([優秀論文獎](#))
8. “以液相層析儀-串聯式質譜儀搭配化學衍生化有效地分析苦茶油之長鏈脂肪酸” 發表於 “2016 【台灣檢驗及品保學會】第二屆第二次年會暨食品衛生安全檢測及保健食品原料的應用” by 莊惠文(Hui-Wen Chuang)、周重谷(Chung-Ku Chou)及徐睿良(Jue-Liang Hsu) (NTU, Taipei, Taiwan)(Oct 1, 2016) ([優秀論文獎](#))

9. "Improved LC-MS/MS Analysis of Long-Chain Fatty Acids and Its Application to Lipidomics" in "13<sup>th</sup> Annual Conference of the Taiwan Society for Mass Spectrometry (第十三屆台灣質譜學會年會)" (NSYSU, Kaohsiung, Taiwan)(Nov 25, 2016) by Zhong-Gu Zhou and **Jue-Liang Hsu**\*.
10. "Angiotensin Converting Enzyme (ACE) Inhibition of Bioactive Peptide Derived from *Spirulina platensis* by Thermolysin Digestion" in "2016 International Conference on Smart Agriculture and the 9th Taiwan-Thailand Bilateral Conference" (NPUST)(Jun 27-Jun29, 2016) by Nur Maulida Safitri and **Jue-Liang Hsu**\*.
11. "Improved LC-MS/MS Analysis of Anticins in *Antrrodia cinnamomea* Using Chemical Derivatization" in "APCE 2015" (NCKU, Tainan, Taiwan) (November 15-18, 2015) by Sin-Hong Chen, Zong-Han Tsai, Ming-Huei Liao, **Jue-Liang Hsu**\*.
12. "Screening of Angiotensin-I Converting Enzyme Inhibitory Peptide Derives from Soft-Shell Turtle Yolk Using Orthogonal Bioassay-Guided Fractionation" in "APCE 2015" (NCKU, Tainan, Taiwan) (November 15-18, 2015) by Dwi Yuli Pujiastuti and **Jue-Liang Hsu**\*. (The Merit Poster Award)
13. "Screening of Antihypertensive Peptides Derived from Enzymatic Hydrolysate of *Cassia obtusifolia* Seeds Using Proteomics Approach" in "APCE 2015" (NCKU, Tainan, Taiwan) (November 15-18, 2015) by Ya-Hui Shih and **Jue-Liang Hsu**\*.
14. "A Multilevel Exploration of Pathogen Drug Resistance Using Proteomics, Secretomics and Peptidomics" in "APCE 2015" (NCKU, Tainan, Taiwan) (November 15-18, 2015) by Sin-Hong Chen, Ming-Hui Liao and **Jue-Liang Hsu**\*. (The Merit Poster Award)
15. "Screening of Angiotensin-I Converting Enzyme Inhibitory Peptides from *Cassia obtusifolia* Seeds Hydrolysate" in "2015 International Symposium on Austronesian Medicine and Alternative Therapy" (NPUST, Pingtung, Taiwan) (December 10-12, 2015) by Ya-Hui Shih and **Jue-Liang Hsu**\*.
16. "Application of Orthogonal Bioassay-Guided Fractionation for Screening of Angiotensin-I Converting Enzyme Inhibitory Peptides" in "2015 International Symposium on Austronesian Medicine and Alternative Therapy" (NPUST, Pingtung, Taiwan) (December 10-12, 2015) by Dwi Yuli Pujiastuti and **Jue-Liang Hsu**\*.
17. "Investigation of Methyl gallate extract from *Rosa laevigata* anti-melanogenesis molecular mechanism on B16F10 melanoma cells" in "2014 International Symposium on Austronesian Medicine and Alternative Therapy" (NPUST, Pingtung, Taiwan) (2014/11/27-28) by Guo-Fong Dai, Yu-Han Cheng, Yu-Jen Wu\*, **Jue-Liang Hsu**\*.
18. "LC-MS/MS method for quantitative analysis of Anticins" in "2014 International Symposium on Austronesian Medicine and Alternative Therapy" (NPUST, Pingtung, Taiwan) (2014/11/27-28) by Zong-Han Tsai and **Jue-Liang Hsu**\*.
19. "A proteomics study on the anti-inflammation effect on RAW264.7 cells caused by the natural product isolated from *Ampelopsis brevipedunculata* Traut var. *Hancei*" in "2014 International Symposium on Austronesian Medicine and Alternative Therapy" (NPUST,

Pingtung, Taiwan) (2014/11/27-28) by Wei-Chu Chien and Jue-Liang Hsu\*. ([Outstanding Poster Award](#))

20. "Identification of a umami peptide in tempeh (Indonesian fermented soybean) and its binding mechanism to the umami receptor" in "The 8th Thailand-Taiwan Bilateral Conference and The 2nd UNTA Meeting On "Science Technology and Innovation for Sustainable Tropical Agriculture and Food (Thailand)" by M.Nur Ghoyatul Amin, Jue-Liang Hsu, Robert John Doerksen, Tzou-Chi Huang\*.(2014/06/26-27)
21. Comparative proteomics towards antimicrobial-resistant pathogens" in "11th TSMS Annual Conference (Taichung, Taiwan)" by Sin-Hong Chen, Ming-Hui Liao and Jue-Liang Hsu\*. (06/29~07/01, 2014)
22. "Screening and Characterization of Angiotensin-I Converting Enzyme Inhibitory Peptides Derived from Enzymatic Hydrolysate of Bitter Melon Seed Proteins" in "2014 年醫護與健康科技研討會 (聖母醫護管理專科學校, 宜蘭)" by Anugerah Dany Priyanto, Jue-Liang Hsu\* and Simon B. Widjanarko. (2014/05/30)
23. "Screening and quantification of bioactive natural products using liquid chromatography-tandem mass spectrometry" in "2014 先進化學學用合一研討會 (靜宜大學, 台中)" by Chia-Chi Ruan and Jue-Liang Hsu\*. (05/08, 2014)([壁報論文競賽第二名](#))
24. "Analytical platform of protein N<sup>α</sup>-acetylation and its proteomics applications" in "2014 先進化學學用合一研討會(靜宜大學, 台中)" Wen-Wei Lo and Jue-Liang Hsu\*. (05/08, 2014)
25. "Quantitative determination of protein phosphorylation degree using mass spectrometry-based approach" in "2014 先進化學學用合一研討會(靜宜大學, 台中)" Ya-Chi Lin and Jue-Liang Hsu\*. (05/08, 2014) ([壁報論文競賽佳作](#))
26. "Enhanced Protein N-acetylation Analysis by SCX and Dimethyl Labeling and Its Application to Discrimination of Protein Isoforms" in "HUPO 12<sup>th</sup> Annual World Congress (Yokohama, Japan)" by Sin-Hong Chen, Chiy-Rong Chen, Shu-Hui Chen, Ding-Tzai Li, and Jue-Liang Hsu\*. (2013/09/14-18)
27. "N-glycosylated membrane proteomics of hepatoma cell lines" in "International Symposium on Agriculture in the Tropic (ISAT 2013) (屏東)" by Chuan-Pao Shih and Jue-Liang Hsu. (2013/05/30)
28. "Study on Angiotensin-I Inhibitory Peptide Derived from Proteolytic Digest of Soft-Shell Turtle Egg White" in "International Symposium on Agriculture in the Tropic (ISAT 2013) (屏東)" by Aisha, Aulanni'am, and Jue-Liang Hsu. (2013/05/30)
29. "Acid-cleavable detergents for membrane proteome analysis" in "International Symposium on Agriculture in the Tropic (ISAT 2013) (屏東)" by Kun-Hui Huang and Jue-Liang Hsu. (2013/05/30)
30. "Chemical Derivatization and its Application in LC-MS/MS Analysis of Fatty Acids" in "International Symposium on Agriculture in the Tropic (ISAT 2013) (屏東)" by

Hsiang-Ming Ho and **Jue-Liang Hsu**. (2013/05/30)

31. "Screening Anti-microbial Compounds from *Houttuynia cordata*" in "International Symposium on Agriculture in the Tropic (ISAT 2013) (屏東)" by Chiuan-Yi Liou and **Jue-Liang Hsu**. (2013/05/30)
32. "Qualitative and quantitative analysis of active components from *Ampelopsis brevipedunculata* (Maxim) Traut var. *hancei* using signature neutral loss assisted tandem MS scan" in "2013 PST Medicinal Chemistry Symposium" (2013 台灣藥學會藥物化學研討會, 墾丁) by Pei-Shiuan Su and **Jue-Liang Hsu**. (2013/01/22-24)
33. "Molecular docking assisted activity screening of natural products from *Ampelopsis brevipedunculata* (Maxim) Traut var. *hancei*" in "2013 PST Medicinal Chemistry Symposium" (2013 台灣藥學會藥物化學研討會, 墾丁) by Chia-Wen Liu and **Jue-Liang Hsu**. (2013/01/22-24)
34. "Large-scale analysis of protein N-terminal acetylation and its application to distinguish protein isoforms and acetylation level determination" in "2012 Taiwan Proteomics Society Annual Conference: Disease Proteomics and Metabolomics" by Sin-Hong Chen, Chiy-Rong Chen and **Jue-Liang Hsu**. (2012/05/31-2012/06/01)
35. "Comprehensive protein expression profiling toward ARV-induced autophagy in Vero cells" in "2012 Taiwan Proteomics Society Annual Conference: Disease Proteomics and Metabolomics" by Sing-Lin Tsai, Hung-Jen Liu and **Jue-Liang Hsu**. (2012/05/31-2012/06/01)
36. "Angiotensin Converting Enzyme-Inhibitory Peptides Activity of Hen Egg White and Chinese Soft-Shelled Turtle Egg White Protein Digest" in "International Symposium of Austronesian Humanities and Custom Medicine 2012" by Reynetha D.S. Rawendra, Aulanni Am, **Jue-Liang Hsu**\*. (2012/05/31)
37. "Purification and characterization of lecithin from soft-shelled turtle egg yolk" in "International Symposium of Austronesian Humanities and Custom Medicine 2012" by Pei-Shuo Wu and **Jue-Liang Hsu**\*. (2012/05/31)
38. "Selective analysis of protein N-terminal acetylation and its application to study the acetylation profiling of HepG2 cells upon oxidative stress" in "2011 International Symposium on Natural Products for Alternative Therapy (Pingtung, Taiwan)" by Sin-Hong Chen, Chiy-Rong Chen and **Jue-Liang Hsu**\*.
39. "Purification and characterization of lecithin from soft-shelled turtle egg yolk" in "2011 International Symposium on Natural Products for Alternative Therapy (Pingtung, Taiwan)" by Pei-Shuo Wu and **Jue-Liang Hsu**.
40. "Comprehensive protein expression profiling toward ARV-induced autophagy in Vero cells" in "2011 International Symposium on Natural Products for Alternative Therapy (Pingtung, Taiwan)" by Sing-Lin Tsai, Hung-Jen Liu and **Jue-Liang Hsu**.
41. "Large-scale membrane protein expression profiling and its application in comprehensive study for membrane protein expression of gallic acid-treated melanoma cells" in "2011

- International Symposium on Natural Products for Alternative Therapy (Pingtung, Taiwan)” by **Jue-Liang Hsu\***, Yu-Jen Wu and Yao-Chi Tsai.
42. “Development of MS-based Approach for Large-scale Membrane Protein Expression Profiling and Its Application in Comprehensive Study for Membrane Protein Expression of Gallic Acid-treated A375 Cells” in “2009 International Symposium on Innovative Agricultural Biotechnology (Pingtung, Taiwan)” by Yao-Chi Tsai and **Jue-Liang Hsu**.
  43. “Enrichment and Analysis of Phosphopeptides Shaved from Membrane Fraction of Salt-stressed Arabidopsis” in “2009 International Symposium on Innovative Agricultural Biotechnology (Pingtung, Taiwan)” by **Jue-Liang Hsu**, Cindy Lee, Lan-Yu Wang, Shu-Ying Wang, Kuo-Chieh Ho, Ing-Feng Chang.
  44. “Enrichment of Glycopeptides from Complex Mixture by Using HILIC Magnetic Beads and Its Application on Simple and Robust Protein N-Glycosylation Sites Determination” in “2009 International Symposium on Innovative Agricultural Biotechnology (Pingtung, Taiwan)” by **Jue-Liang Hsu**, Chia-Hao Yeh, Ding-Tzai Li and Fong-Ku Shi.
  45. “Selective Detection of Glycoproteins in Polyacrylamide Gels Using an Rh-Hydrazide Fluorescent Dye” in “2009 International Symposium on Innovative Agricultural Biotechnology (Pingtung, Taiwan)” by **Jue-Liang Hsu**, Yu-Hsuan Chiang, Ding-Tzai Li and Fong-Ku Shi.
  46. “Enrichment and Analysis of Phosphopeptides Shaved from Membrane Fraction of Salt-stressed Arabidopsis” in “2009 TPS International Proteomics Conference and 5<sup>th</sup> AOHUPO MPI Workshop (2009) in Taipei, Taiwan” by **Jue-Liang Hsu**, Lan-Yu Wang, Shu-Ying Wang, Kuo-Chieh Ho, Ing-Feng Chang.
  47. “Enrichment of glycopeptides from complex mixture by using HILIC magnetic beads and its application on simple and robust protein N-glycosylation sites determination” in “2008 Taiwan-Japan Proteomics Symposium (Taipei)” by **Jue-Liang Hsu**, Ding-Tzai Li, and Fong-Ku Shi.
  48. “Directly identify protein N-terminal residues by mass spectrometry and its potential applications in protein-level comparative proteomics” in “55<sup>th</sup> ASMS Conference on Mass Spectrometry (2007) in Indianapolis, Indiana (USA)” by **Jue-Liang Hsu**, Ding-Tzai Li, and Fong-Ku Shi.
  49. “An efficient and convenient phosphoprotein purification column for the enrichment of phosphoproteins from protein mixture” in “Chinese chemical society meeting 2006, Taipei” by **Jue-Liang Hsu** and Kuan-Hung Chen.
  50. “Chemical derivitization-assisted top-down approach to directly identify protein N-terminal residues and its applications in protein-level comparative proteomics” in “Chinese chemical society meeting 2006, Taipei” by **Jue-Liang Hsu** Ding-Tzai Li, and Fong-Ku Shi.
  51. “Fabrications of functional MALDI plates and their applications in on-target sample preparations for MALDI-TOF analysis” in “Chinese chemical society meeting 2006,

Taipei” by **Jue-Liang Hsu** and Lan-Yu Wang.

52. “Stable-Isotope based Multiplex Labeling Coupled with LC-MS/MS Using in Protein Expression Profiling: Potential Application in Study of Time Course or Dosage Effect for Protein Expression” in “HUPO 3<sup>rd</sup> ANNUAL WORLD CONGRESS, Beijing (China) 2004” by **Jue-Liang Hsu**, Sheng-Yu Huang, and Shu-Hui Chen.
53. “Beyond Quantitative Proteomics: Signal Enhancement of the a1 ion as a Mass Tag for Peptide Sequencing Using Dimethyl Labeling” in “2004 International Conference of Advanced Biotechnology Dialogue between Proteomics and Biotechnology, Tainan” by **Jue-Liang Hsu**, Sheng-Yu Huang, Jen-Taie Shiea and Shu-Hui Chen.
54. “Novel Stable-isotope labeling for Quantitative Proteomics and its Application for Protein Expression Profiling ” by **Jue-Liang Hsu**, Sheng-Yu Huang, and Shu-Hui Chen. “HUPO 2<sup>nd</sup> Annual & IUBMB XIX Joint World Congress, Montreal (Canada) 2003”
55. “Novel Fluorescein Affinity Chromatography for Protein Characterization Using Mass Spectrometry” by **Jue-Liang Hsu** and Shu-Hui Chen in “HUPO 2<sup>nd</sup> Annual & IUBMB XIX Joint World Congress, Montreal (Canada) 2003”
56. “Two-step immobilized metal affinity chromatography (IMAC) for the analysis of phosphoproteins using mass spectrometry” by Sheng-Yu Huang, **Jue-Liang Hsu**, and Shu-Hui Chen in “ISPPP, Florida (USA) 2003”.

#### **D. Oral presentation**

1. “Chemical Derivatization and Its Applications in LC-MS/MS Analysis of Non-UV-Active and Extremely Hydrophobic Carboxylic Acids” in “13<sup>th</sup> Annual Conference of the Taiwan Society for Mass Spectrometry (第十三屆台灣質譜學會年會)” (NSYSU, Kaohsiung, Taiwan)(Jun 27-Jun29, 2016).
2. “Screening of anti-hypertensive peptides from unfertilized soft-shelled turtle eggs “ in “2014 International Symposium on Austronesian Medicine and Alternative Therapy” (NPUST, Pingtung, Taiwan) (November 27-28, 2014)
2. “Translational proteomics in health food development” in Department of Biotechnology in Kaohsiung Medical University (October 22, 2014)
3. “Natural product analysis and molecular docking-assisted activity screening” in “International Seminar and Symposium: Use of Herbs for Prevention of Vascular and Neurodegenerative Diseases” (Brawijaya University, Malang, Indonesia)(3/6-3/9, 2013)(p 4)
4. “Targeting proteomics for protein N-terminal acetylation” in “Workshop in Food Science and Technology” (Brawijaya University, Malang, Indonesia)(3/7, 2013)(pP21-37)
5. “Selective analysis of protein N-terminal acetylation and its application to study the acetylation profiling of HepG2 cells upon oxidative stress” in Chemical Biology section in “Annual Meeting of Chemical Society” (National Cheng-Kung University, Tainan) (12/1-12/2, 2012)(p B32)

6. “Proteomics study in stem cell research” in “第六屆台灣幹細胞學會年會暨中山醫學大學 50 週年校慶”(中山醫學大學，台中)(10/9, 2010)(p 40-41).
7. “Development of an efficient MS-based platform for comprehensive proteome research” in “2010 國科會分析小組春季會議”(國立海洋大學，基隆)(01/09, 2010).

#### E. Books

1. 化學—結構與動力(台灣西書出版): Spencer 原著/徐睿良 譯
2. 生物科技特論(國立屏東科技大學農學院叢書 041): 施玫玲、劉宏仁、張誌益、陳又嘉、鄭雪玲、徐睿良及徐志宏合著。國立屏東科技大學 農學院彙編。

#### 執行計畫

計畫名稱	計畫內擔任之工作	起迄年月	補助或委託機構	申請(執行)情形
含半胱胺酸及精胺酸蛋白質之液相層析分析方法之研究(1/2)(91-2113-M-006-021-)	共同主持人	2002/08/01~2003/10/31	國科會	執行完成
含半胱胺酸及精胺酸蛋白質之液相層析分析方法之研究(2/2)(92-2113-M-006-024-)	共同主持人	2003/08/01~2004/07/31	國科會	執行完成
鼓勵中小企業開發新技術推動計畫(SBIR)—整合型MALDI質譜晶片之開發	計畫主持人	2007/1/1~2007/6/30	經濟部	執行完成
協助服務業研究發展輔導計畫 業者創新研發計畫—全方位蛋白質體質譜分析技術服務	計畫主持人	2006/10/1~2007/10/31	經濟部	執行完成
新穎醣基化蛋白質分析方法之開發 (NSC 98-2113-M-020 -002-MY2)	計畫主持人	2009/8/1~2011/7/31	國科會	執行完成
99 年度學界協助中小企業科技關懷計畫—鰵卵及卵殼膜活性成分之分析及其產品開發之應用(Z09900016)	計畫主持人	2010/7/1~2010/12/31	經濟部	執行完成
厭氧真菌生產木質纖維分解酵素	共同主持人	2010/7/1~2011/6/30	台灣中油股份有限公司	執行完成



探討			公司煉製 研究所	
膜蛋白之萃取與磷酸化分析	計畫主持人	2010/12/1~2011/ 11/30	鎂陞科技 股份有限 公司	執行完成
膜蛋白質體及其醣基化分析方法 之開發 (NSC 100-2113-M-020 -001 -MY2)	計畫主持人	2011/8/1~2013/7 /31	國科會	執行完成
台灣植物精油萃取及生物活性分 析 (B10100109)	共同主持人	2012/5/1~2014/ 4/30	Young Living (USA)	執行完成
礬類抗發炎藥物之前期開發	計畫主持人	2012/3/1~2012/ 8/31	鴻諭藥品 生技公司	執行完成
礬類抗腫瘤藥物之前期開發	計畫主持人	2012/9/1~2013/ 2/28	鴻諭藥品 生技公司	執行完成
台灣八角金盤活性天然物之多樣 性功能、作用機制及其代謝質體學 之研究－台灣八角金盤活性天然 物生合成之代謝質體學研究 (NSC 101-2621-B-020 -003)	共同主持人	2012/8/1~2013/ 7/31	國科會	執行完成
台灣八角金盤活性天然物之多樣 性功能、作用機制及其代謝質體學 之研究－台灣八角金盤天然物對 降血糖作用機制及代謝質體學研 究 (NSC 101-2621-B-020 -002)	共同主持人	2012/8/1~2013/ 7/31	國科會	執行完成
台越國合計畫－台灣越南合作開 發越南富含活性成分可食植物成	共同主持人	2013/1/1~2014/ 12/31	國科會	執行完成

為功能性產品				
牛樟芝成分之純化與分析	共同主持人	2012/12/16~2013/12/15	喬本生醫股份有限公司	執行完成
102年經濟部學界協助中小企業科技關懷計畫—飼料添加劑啤酒酵母發酵物之活性成分分析	計畫主持人	2013/6/1~2013/1/31	經濟部	執行完成
102年度學界協助中小企業科技關懷計畫專案輔導計畫—傳統生技食品品管加工經營行銷輔導/果醋中保健活性成分分析	計畫主持人	2013/6/1~2013/1/31	經濟部	執行完成
103年度學界協助中小企業科技關懷計畫專案輔導計畫—高屏地區食品產業經營之輔導/辨識釀造果醋真偽之方法開發	計畫主持人	2014/5/1~2014/10/31	經濟部	執行完成
具皮膚保健功效素材之成分分析 (NT100,000) B10300268	計畫主持人	2014/7/1~2014/12/31	圓安生醫科技股份有限公司	執行完成
蛋白質 N-端乙醯基化分析方法之開發及其應用於蛋白質亞型之區分及探討此修飾與細胞氧化損傷之關聯 (NSC 102-2113-M-020-001-MY2) (NT 2,632,000)	計畫主持人	2013/8/1~2015/7/31	國科會	執行完成
藍綠藻功效成份物質分析方法之開發 (NT100,000) B10400042	計畫主持人	2015/1/1~2015/3/31	遠東藍藻工業股份有限公司	執行完成
經濟部科技研究發展專案「協助傳統產業技術開發計畫(CITD)」-「活性胜肽保健飲品之開發計畫」企業配合款 (NT400,000) B10400283	計畫主持人	2015/4/1~2015/1/30	揚大生技股份有限公司	執行完成
蛋白質體分析技術應用於活性胜肽之篩選(MOST 104-2113-M-020-001) (NT 1,300,000)	計畫主持人	2015/8/1~2016/7/31	科技部	執行完成
藍藻與綠藻蛋白水解物中功能性胜肽之篩選與活性評估 (NT300,000) B10500146	計畫主持人	2016/4/1~2017/3/31	遠東藍藻工業股份有限公司	執行完成
改良式長鏈脂肪酸液相層析-串聯	計畫主持人	2016/8/1~2017/7/31	科技部	執行完成

式質譜分析平台之開發及其於脂質代謝體學之應用(MOST 105-2113-M-020-001)(NT 1,400,000)				
改良式長鏈脂肪酸液相層析-串聯式質譜分析平台之開發及其於脂質代謝體學之應用(MOST 106-2113-M-020-001)(NT 1,200,000)	計畫主持人	2017/8/1~2018/7/31	科技部	進行中
富含川陳皮素香檬醋飲之開發計畫 (NT400,000) B10600117	計畫主持人	2017/4/1~2017/10/31	揚大生技股份有限公司	執行完成
保健食品檢驗方法建立及機能性成分分析(NT400,000) B10600298	計畫主持人	2017/8/1~2019/7/31	遠東藍藻工業股份有限公司	進行中
由火龍果皮開發高甜菜紅素之功效性食用色素 (NT400,000) B10700109	計畫主持人	2018/4/1~2018/10/31	海森林生技股份有限公司	進行中
以串聯式質譜決定長鏈不飽和脂肪酸碳-碳雙鍵位置之新式分析方法(MOST 107-2113-M-020-001-)(NT 1,200,000)	計畫主持人	2018/8/1~2019/7/31	科技部	進行中