

# 行政院科技部個人資料表

## 一、基本資料

				填表日期： 2020 / 1 / 31	
中文姓名	余 兆 松	英文姓名	Yu, Jau-Song		
			(Last Name)	(First Name)	(Middle Name)
國 籍	中 華 民 國	性 別	<input checked="" type="checkbox"/> 男 <input type="checkbox"/> 女	出生日期	1962 年 01 月
聯絡地址	□□□□□桃園市龜山區文化一路 259 號長庚大學分子生物學科				
聯 絡 電 話	(公). 03-2118800 ext.5171 (宅/手機).				
傳 真 號 碼	03-2118891	E-MAIL	yusong@mail.cgu.edu.tw		

## 二、主要學歷 由最高學歷依次填寫，若仍在學者，請在學位欄填「肄業」。

學校名稱	國別	主修學門系所	學位	起訖年月(西元年/月)
國立清華大學	中華民國	生命科學所	博士	1986 / 09 至 1989 / 06
國立清華大學	中華民國	生命科學所	碩士	1984 / 09 至 1986 / 06
國立成功大學	中華民國	化學系	學士	1980 / 09 至 1984 / 06
				____ / ____ 至 ____ / ____

## 三、現職及與專長相關之經歷 指與研究相關之專任職務，請依任職之時間先後順序由最近者往前追溯。

服務機構	服務部門／系所	職稱	起訖年月(西元年/月)
現職：長庚大學	分子生物學科	教授	2001 / 08 起
長庚大學	分子醫學研究中心	主任	2016 / 08 起
經歷：長庚大學	貴重儀器中心	主任	2001 / 08 至 2016 / 07
長庚大學	分子生物學科	副教授	1994 / 08 至 2001 / 07
國立清華大學	生物醫學所	博士後研究	1991 / 06 至 1994 / 01
			____ / ____ 至 ____ / ____

## 四、專長 請自行填寫與研究方向有關之學門及次領域名稱。

1. Protein Chemistry	2. Signal Transduction	3. Proteomics	4. Tumor Biomarker
----------------------	------------------------	---------------	--------------------

## 五、論文著述：(\*, corresponding author)

1. Yang, S.-D.\*, Fong, Y.-L., and **Yu, J.-S.** (1984) Characterization of 3 distinct phosphoprotein phosphatase in mammalian tissues. **J. Chin. Biochem. Soc.** 13, 48-59. (NSC-73-0203-B007-06)
2. Yang, S.-D.\*, **Yu, J.-S.**, and Fong, Y.-L. (1986) Purification and characterization of two inactive/latent protein phosphatases from pig brain. **J. Biol. Chem.** 261, 5590-5596. (NSC-74-0201-B007-02) (SCI)
3. Yang, S.-D.\*, Liu, J.-S., Fong, Y.-L., **Yu, J.-S.**, and Tzen, T.-C. (1987) Endogenous basic protein phosphatases in the brain myelin. **J. Neurochem.** 48, 160-166. (SCI) (NSC-74-0201-B007-02) (SCI)
4. Yang, S.-D.\*, **Yu, J.-S.**, Liu, J.-S., Tzen, T.-C., and Wang, J.-K. (1987) The type-1 protein phosphatase activating factor FA is a membrane-associated protein kinase in brain, liver, heart and muscles. **Biochem. Biophys. Res. Commun.** 142, 38-46. (NSC-74-0201-B007-02) (SCI)
5. Yang, S.-D.\*, Fong, Y.-L., **Yu, J.-S.**, and Liu, J.-S. (1987) Identification and characterization of a phosphorylation-activated, cAMP and  $\text{Ca}^{2+}$ -independent protein kinase in brain. **J. Biol. Chem.** 262, 7034-7040. (NSC-74-0201-B007-02, NSC-75-0201-B007-02) (SCI)
6. Yang, S.-D.\*, Ho, L.-T., Fung, T.-J., and **Yu, J.-S.** (1989) Insulin induces activation of kinase FA in membranes and thereby promotes activation of ATP.Mg-dependent phosphatase in Adipocytes. **Biochem. Biophys. Res. Commun.** 158, 762-768. (SCI)
7. **Yu, J.-S.**, and Yang, S.-D.\* (1989) Identification and characterization of a  $\text{Mn}^{2+}$ /phospholipid-dependent protein phosphatase from brain membranes. **J. Protein Chem.** 8, 499-517. (SCI)
8. Yang, S.-D.\*, **Yu, J.-S.**, and Hua, C.-W. (1990) On the mechanism of activation of protein kinase FA (an activating factor of ATP.Mg-dependent protein phosphatase) in brain myelin. **J. Protein Chem.** 9, 75-82. (NSC-78-0203-B007-10) (SCI)
9. Yang, S.-D.\*, **Yu, J.-S.**, and Chen, H.-C. (1990) Regulation of protein kinase FA (a transmembrane signal of insulin and epidermal growth factor) in the brain. **Biochem. Biophys. Res. Commun.** 166, 267-272. (NSC-78-0203-B007-10) (SCI)
10. Yang, S.-D.\*, **Yu, J.-S.**, and Lai, Y.-G. (1991) Identification and characterization of the ATP. Mg-dependent protein phosphatase activator (FA) as a microtubule protein kinase in the brain. **J. Protein Chem.** 10, 171-181. (NSC-78-0203-B007-10, NSC-79-0203-B007-10) (SCI)
11. Yang, S.-D.\*, **Yu, J.-S.**, Fong, Y.-L., and Liu, J.-S. (1992) The mechanism of activation of protein kinase FA (the activator of type-1 protein phosphatase) in brain synaptosomes. **Biochem. Biophys. Res. Commun.** 182, 129-136. (NSC-80-0203-B007-10) (SCI)
12. Lee, W.-C., **Yu, J.-S.**, Yang, S.-D., and Lai, Y.-K.\* (1992) Reversible hyperphosphorylation and reorganization of vimentin intermediate filaments by okadaic acid in 9L rat brain tumor cells. **J. Cell. Biochem.** 49, 378-393. (NSC-80-0203-B007-10) (SCI)
13. **Yu, J.-S.**, and Yang, S.-D.\* (1993) Identification and characterization of protein kinase FA/glycogen synthase kinase-3 in brain clathrin-coated vesicles. **J. Neurochem.** 60, 1714-1721. (SCI) (NSC-80-0203-B007-10) (SCI)
14. **Yu, J.-S.**, and Yang, S.-D.\* (1993) Immunological and biochemical study on tissue and subcellular distributions of protein kinase FA (an activating factor of ATP.Mg-dependent protein phosphatase): A simplified and efficient procedure for high quantity purification from brain. **J. Protein Chem.** 12, 665-674. (NSC-81-0203-B007-509) (SCI)
15. Yang, S.-D.\*, **Yu, J.-S.**, Liu, W.-K., and Yen, S.-H. (1993) Synergistic control mechanism for abnormal site phosphorylation of Alzheimer's diseased brain tau by kinase FA/GSK-3 $\alpha$ . **Biochem. Biophys. Res. Commun.** 197, 400-406. (SCI) (NSC-82-0203-B007-29) (SCI)
16. Yang, S.-D.\*, Song, J.-S., **Yu, J.-S.**, and Shiah, S.-G. (1993) Protein kinase FA/GSK-3 phosphorylates tau on Ser<sup>235</sup>-Pro and Ser<sup>404</sup>-Pro that are abnormally phosphorylated in Alzheimer's disease brain. **J. Neurochem.** 61, 1742-1747. (NSC-80-0203-B007-10, NSC-81-0203-B007-509) (SCI)
17. **Yu, J.-S.**, and Yang, S.-D.\* (1994) Protein kinase FA/glycogen synthase kinase-3 predominantly phosphorylates the *in vivo* site Thr<sup>97</sup>-Pro in brain myelin basic protein. Evidence for Thr-Pro and Ser-Arg-X-X-Ser as consensus sequences motif. **J. Neurochem.** 62, 1596-1603.

- (NSC-82-0203-B007-29) (SCI)
18. **Yu, J.-S.**, and Yang, S.-D.\* (1994) Okadaic acid, a serine/threonine phosphatases inhibitor induces tyrosine dephosphorylation/inactivation of protein kinase FA/GSK-3 $\alpha$  in A431 cells. **J. Biol. Chem.** 269, 14341-14344. (NSC-81-0203-B007-509, NSC-82-0203-B007-29) (SCI)
  19. **Yu, J.-S.**, and Yang, S.-D.\* (1994) Tyrosine dephosphorylation and concurrent inactivation of protein kinase FA/GSK-3 by genistein in A431 cells. **J. Cell. Biochem.** 56, 131-141. (NSC-81-0203-B007-509, NSC-82-0203-B007-29) (SCI)
  20. Yang, S.-D.\*, **Yu, J.-S.**, Shiah, S.-G., and Huang, J.-J. (1994) Protein kinase FA/GSK-3 $\alpha$  after heparin potentiation phosphorylates tau on the sites abnormally phosphorylated in Alzheimer's disease brain. **J. Neurochem.** 63, 1416-1425. (NSC-81-0203-B007-509, NSC-82-0203-B007-29) (SCI)
  21. Yang, S.-D.\*, **Yu, J.-S.**, and Wen, Z.-D. (1994) Tumor promoter phorbol ester reversibly modulates tyrosine dephosphorylation/inactivation of protein kinase FA/GSK-3 $\alpha$  in A431 cells. **J. Cell. Biochem.** 56, 550-558. (NSC-81-0203-B007-509, NSC-82-0203-B007-29) (SCI)
  22. Huang, T.-J., Lee, T.-T., Lee, W.-C., Lai, Y.-K., **Yu, J.-S.**, and Yang, S.-D.\* (1994) Autophosphorylation-dependent protein kinase phosphorylates Ser<sup>25</sup>, Ser<sup>38</sup>, Ser<sup>65</sup>, Ser<sup>71</sup> and Ser<sup>411</sup> in vimentin and thereby inhibits cytoskeletal intermediate filament assembly. **J. Protein Chem.** 13, 517-525. (NSC-81-0203-B007-509, NSC-82-0203-B007-29) (SCI)
  23. **Yu, J.-S.**, and Yang, S.-D.\* (1995) Phosphorylation/activation of phosphorylase b kinase by cAMP/Ca<sup>2+</sup>-independent, autophosphorylation-dependent protein kinase. **Biochem. Biophys. Res. Commun.** 207, 140-147. (NSC-81-0412-B182-32, NSC-82-0203-B007-29) (SCI)
  24. **Yu J.-S.**, Lee S.-C., and Yang, S.-D.\* (1995) Effect of Mg<sup>2+</sup> concentrations on phosphorylation/activation of phosphorylase b kinase by cAMP/Ca<sup>2+</sup>-independent, autophosphorylation-dependent protein kinase. **J. Protein Chem.** 14, 747-752. (NSC-81-0412-B182-32, NSC-82-0203-B007-29) (SCI)
  25. Yang, S.-D.\*, **Yu, J.-S.**, Lee, T.-T., Yang, C.-C., Ni, M.-H., Yang, Y.-Y. (1995) Dysfunction of protein kinase FA/GSK-3 $\alpha$  in lymphocytes of patients with schizophrenic disorder. **J. Cell. Biochem.** 59, 108-116. (SCI) (NSC-84-2331-B007-001, NSC-84-2311-B007-001) (SCI)
  26. Yang, S.-D.\*, **Yu, J.-S.**, Lee, T.-T., Ni, M.-H., Yang, C.-C., Ho, Y.-S., and Tsen, T.-Z. (1995) Association of protein kinase FA/GSK-3 $\alpha$  (a particular member of proline-directed protein kinase family) with human cervical carcinoma dedifferentiation and progression. **J. Cell. Biochem.** 59, 143-150. (NSC-84-2331-B007-001, NSC-84-2311-B007-001) (SCI)
  27. Lee, T.-T., Ho, Y.-S., **Yu, J.-S.**, and Yang, S.-D.\* (1995) Overexpression of cellular activity and protein level of protein kinase FA/GSK-3 $\alpha$  correlates with human thyroid tumor cell dedifferentiation. **J. Cell. Biochem.** 58, 474-480. (NSC-84-2331-B007-001, NSC-84-2311-B007-001) (SCI)
  28. **Yu, J.-S.**, Chan, W.-H., and Yang, S.-D.\* (1996) Activation of the ATP.Mg-dependent type-1 protein phosphatase by the Fe<sup>2+</sup>/ascorbate system. **J. Protein Chem.** 15, 455-460. (NSC-85-2331-B182-111) (SCI)
  29. Yang, S.-D.\*, **Yu, J.-S.**, Yang, C.-C., Lee, S.-C., Lee, T.-T., Ni, M.-H., Kuan, C.-Y., and Chen, H.-C. (1996) Overexpression of protein kinase FA/GSK-3 $\alpha$  (a proline-directed protein kinase) correlates with human hepatoma dedifferentiation/progression. **J. Cell. Biochem.** 61, 238-245. (NSC-84-2331-B007-001, NSC-84-2311-B007-001) (SCI)
  30. Ho, L.-T., Chou, Y.-C., **Yu, J.-S.**, and Yang, S.-D.\* (1996) Endothelin-1 and insulin induce inactivation of protein kinase FA/GSK-3 $\alpha$  in a common signaling pathway. **J. Biomed. Sci.** 3, 275-279. (NSC-84-2331-B075-059, NSC-84-2311-B007-001) (SCI)
  31. **Yu, J.-S.\***, Chen, H.-C., and Yang, S.-D. (1997) Reversible tyrosine phosphorylation/dephosphorylation of proline-directed protein kinase FA/GSK-3 $\alpha$  in A431 cells. **J. Cell. Physiol.** 171, 95-103. \*corresponding author. (NSC-85-2331-B182-111) (SCI)
  32. **Yu, J.-S.\***, Chan, W.-H., and Yang, S.-D. (1997) Selective interaction of of protein kinase FA/GSK-3 $\alpha$  with membrane phospholipids. **Biochem. Biophys. Res. Commun.** 237, 331-335. (NSC-85-2331-B182-111) (SCI)

33. **Yu, J.-S.\***, Chen, W.-J., Ni, M.-H., Chan, W.-H., and Yang, S.-D. (1998) Identification of the regulatory autophosphorylation site of autophosphorylation-dependent protein kinase : Evidence that auto-kinase belongs to a member of the p21-activated kinase family. **Biochem. J.** 334, 121-131. (NSC-87-2314-B182-078) (SCI)
34. Tang, T. -K., Chang, W.-C., Chan, W.-H., Yang, S. -D., Ni, M. -H., and **Yu, J. -S.\*** (1998) Proteolytic cleavage and activation of PAK2 during UV irradiation-induced apoptosis in A431 cells. **J. Cell. Biochem.** 70, 442-454. \*corresponding author. (NSC-87-2314-B182-078) (SCI)
35. Chan, W.-H., **Yu, J. -S.\***, and Yang, S. -D. (1998) Heat shock stress induces cleavage and activation of PAK2 in apoptotic cells. **J. Protein Chem.** 17, 485-494. \*corresponding author. (NSC-87-2314-B182-078) (SCI)
36. **Yu, J.-S.** (1998) Activation of protein phosphatase 2A by the Fe<sup>2+</sup>/ascorbate system. **J. Biochem.** 124, 225-230. (NSC-85-2331-B182-111 and NSC-87-2314-B182-078) (SCI)
37. Chan, W.-H., **Yu, J.-S.**, Yang, S.-D.\* (1999) PAK2 is cleaved and activation during hyperosmotic shock-induced apoptosis via a caspase-dependent mechanism. Evidence for the involvement of oxidative stress. **J. Cell. Physiol.** 178, 397-408. (NSC-87-2314-B182-078) (SCI)
38. Chan, W.-H., and **Yu, J.-S.\*** (2000) Inhibition of UV irradiation-induced oxidative stress and apoptotic biochemical changes in human epidermal carcinoma A431 cells by genistein. **J. Cell. Biochem.** 78, 73-84. (SCI) (NSC88-2314-B-182-036, NSC89-2316-B-182-005) (SCI)
39. Chan, W.-H., and **Yu, J.-S.\*** and Yang, S.-D. (2000) Apoptotic signal cascade in photosensitized human epidermal carcinoma A431 cells. Involvement of singlet oxygen, c-Jun N-terminal kinase, caspase-3, and p21-activated kinase 2. **Biochem. J.** 351, 221-232. \*corresponding author. (NSC88-2314-B-182-036, NSC89-2316-B-182-005) (SCI)
40. **Yu, J.-S.\*** Chang, S.-H., Chan, W.-H., and Chen, H.-C. (2001) Enzyme-linked immunosorbent assay for determination of p21-activated kinase activity. **J. Biochem.** 129, 243-251. (NSC89-2316-B182-005, NSC89-2320-B-182-086) (SCI)
41. **Yu, J.-S.\***, Tsai, H. -C., Wu, C.-C., Weng, L.-P., Li, S.-P., Chung P.-J., and Chang Y.-S. (2002) Induction of inducible nitric oxide synthase by the Epstein-Barr virus B95-8-derived LMP1 in Balb/3T3 cells promotes stress-induced cell death and impairs LMP1-mediated transformation. **Oncogene** 21, 8047-8061. (NSC89-2318-B-182-005-M51, NSC90-2316-B- 182-003) (SCI)
42. Chi L-M\*, **Yu J.-S.**, and Chang Y.-S. (2002) Identification of protein kinase CK2 as a potent kinase of Epstein-Barr virus latent membrane protein 1. **Biochem. Biophys. Res. Commun.** 294, 586-591. (SCI)
43. Huang, H.C, **Yu, J.-S.**, Tsay, C.C., Lin, J.H., Huang, S.Y., Fang, W.T., Liu, Y.C., Tzang, B.S., and Lee, W.C.\* (2002) Purification and characterization of porcine testis 90-kDa heat shock protein (HSP90) as a substrate for various protein kinases. **J. Protein Chem.** 21, 111-121. (SCI)
44. Hsieh, Y.-J., Wu C.-C., Chang C.-J., and **Yu J.-S.\*** (2003) Subcellular localization of Photofrin® determines the cell death phenotype of human epidermoid carcinoma A431 cells triggered by photodynamic therapy: When plasma membranes are the main targets. **J. Cell. Physiol.** 194, 363-375. (NSC89-2320-B-182-086) (SCI)
45. Chan W.-H.\* , Wu, C.-C. and **Yu J.-S.** (2003) Curcumin inhibits UV irradiation-induced oxidative stress and apoptotic biochemical changes in human epidermoid carcinoma A431 cells. **J. Cell. Biochem.** 90, 327-338. (NSC89-2320-B-182-038) (SCI)
46. Fang, C.-Y., Chang, Y.-S., Chow, K.-P., **Yu, J.-S.**, and Chang, H.-Y\*. (2004) Construction and characterization of monoclonal antibodies specific to Epstein–Barr virus latent membrane protein 1. **J. Immunol. Methods** 287, 21-30. (SCI)
47. Tsai, I.-C., Hsieh, Y.-J., Lyu, P.-C., and **Yu, J.-S.\*** (2005) Anti-phosphopeptide antibody, P-STM as a novel tool for detecting mitotic phosphoproteins: Identification of lamins A and C as two major targets. **J. Cell. Biochem.** 94, 967–981. (NSC91-2320-B-182-038, NSC92-2320-B-182-047) (SCI)
48. Wu, C.-C, Chien K.-Y., Tsang N-M, Chang K-P, Ho S-P, Tsao C-H, Chang Y-S, and **Yu, J.-S.\*** (2005) Cancer cell-secreted proteomes as a basis for searching potential tumor markers - nasopharyngeal carcinoma as a model. **Proteomics** 5, 3173-3182. (NSC91–2320-B-182–038 and NSC92–2320-B-182–047) (SCI)

49. Peng, T.-I., Chang C.-J., Guo, M.-J., Wang, Y.-H., **Yu, J.-S.**, Wu, H.-Y., and Jou, M.-J.\* (2005) Mitochondrion-targeted photosensitizer enhances the photodynamic effect-induced mitochondrial dysfunction and apoptosis. **Ann. N.Y. Acad. Sci.** 1042, 419-428. (SCI)
50. Hsuuw Y.D., Chang C.-K., Chan W.H.\* and **Yu J.-S.** (2005) Curcumin prevents methylglyoxal-induced oxidative stress and apoptosis in mouse embryonic stem cells and blastocysts. **J. Cell. Physiol.** 205, 379-386. (SCI)
51. Hwang, T.-L.\*, Liang, Y., Chien K.-Y., and **Yu, J.-S.** (2006) Overexpression and elevated serum levels of phosphoglycerate kinase 1 in pancreatic ductal adenocarcinoma. **Proteomics** 6, 2259–2272. (SCI)
52. Chang KP, Hao SP, Lin SY, Ueng SH, Pai PC, Tseng CK, Hsueh C, Hsieh MS, **Yu JS**, Tsang NM.\* (2006) The 30-bp Deletion of Epstein-Barr Virus Latent Membrane Protein-1 Gene Has No Effect in Nasopharyngeal Carcinoma. **Laryngoscope** 116, 541-546. (SCI)
53. Chien KY, Chang YS, **Yu JS**, Fan L-W, Lee CW and Chi LM\*. (2006) Identification of a new in vivo phosphorylation site in the cytoplasmic carboxyl terminus of EBV-LMP1 by tandem mass spectrometry. **Biochem. Biophys. Res. Commun.** 348, 47-55. (SCI)
54. Kuo WL, Lee LY, Wu CM, Wang CC, **Yu JS**, Liang Y, Lo CH, Huang KH, Hwang TL. (2006) Differential expression of claudin-4 between intestinal and diffuse-type gastric cancer. **Oncol. Rep.** 16, 729-734. (SCI)
55. Lu TJ, Lai WY, Huang CY, Hsieh WJ, **Yu JS**, Hsieh YJ, Chang WT, Leu TH, Chang WC, Chuang WJ, Tang MJ, Chen TY, Lu TL, Lai MD. (2006) Inhibition of cell migration by autophosphorylated mammalian sterile 20-like kinase 3 (MST3) involves paxillin and protein tyrosine phosphatase (PTP)-PEST. **J. Biol. Chem.** 281, 38405-38417. (SCI)
56. Tsai CL, Li HP, Lu YJ, Hsueh C, Laing Y, Chen CL, Tsao SW, Tse KP, **Yu JS** and Chang YS\*. (2006). Activation of DNA methyltransferase 1 by Epstein-Barr Virus LMP1 involves JNK signaling. **Cancer Res.** 66, 11668-11676. (SCI)
57. Ma DH\*, Chen JK, Zhang F, Lin KY, Yao JY, **Yu JS**. (2006) Regulation of corneal angiogenesis in limbal stem cell deficiency. **Prog. Retin. Eye Res.** 25, 563-590. (SCI)
58. Chen C-T, Chen W-Y, Tsai P-J, Chien K-Y, **Yu J-S** and Chen Y-C\*. (2007) Rapid enrichment of phosphopeptides and phosphoproteins from complex samples using magnetic particles coated with alumina as the concentrating probes for MALDI MS analysis. **J. Proteome Res.** 6, 316-325. (SCI)
59. Huang W-C, Hsu R-M, Chi L-M, Leu Y-L, Chang Y-S and **Yu J-S\***. (2007) Selective downregulation of EGF receptor and downstream MAPK pathway in human cancer cell lines by active components partially purified from the seeds of *Livistona chinensis* R. Brown. **Cancer Lett.** 248, 137-146. (SCI)
60. Tse K-P, Tsang N-M\*, Chen K-D, Liang Y, Li H-P, Hsueh C, Chang K-P, **Yu J-S**, Hao S-P, Hsieh L-L and Chang Y-S\*. (2007) Single nucleotide polymorphism at -2518 of the MCP-1 gene regulatory region is associated with metastasis of nasopharyngeal carcinoma. **Clin. Cancer Res.** 13, 6320-6326. (SCI)
61. Ni M-H, Wu C-C, Chan W-H, Chien K-Y and **Yu J-S\***. (2008) GSK-3 mediates the okadaic acid-induced modification of collapsin response mediator protein-2 in human SK-N-SH neuroblastoma cells. **J. Cell. Biochem.** 103(6), 1833-1848. (SCI)(NSC95-2745-B-182-003-URD)
62. Wu C-C, Chen H-C, Chen S-J, Liu H-P, Hsieh Y-Y, Yu C-J, Tang R, Liang Y, Hsieh L-L\*, **Yu J-S\*** and Chang Y-S. (2008) Identification of collapsin response mediator protein-2 as a potential marker of colorectal carcinoma by comparative analysis of cancer cell secretomes. **Proteomics** 8(2), 316-332. (NSC94-2745-B-182-003-URD) \*corresponding authors. (SCI) (NSC94-2745-B-182-003-URD)
63. Wu CC, Peng PH, Chang YT, Huang YS, Chang KP, Hao SP, Tsang NM, Yeh CT, Chang YS, and **Yu JS\*** (2008) Identification of potential serum markers for nasopharyngeal carcinoma from a xenografted mouse model using Cy dye labeling combined with three-dimensional fractionation. **Proteomics** 8(17), 3605-3620. (SCI) (NSC94-2745-B-182- 003-URD)
64. Wu C-C, Huang Y-S, Lee L-Y, Liang Y, Tang R-P, Chang Y-S, Hsieh L-L\*, and **Yu J-S\***. (2008) Overexpression and elevated plasma level of tumor-associated antigen 90K/Mac-2 binding protein

- in colorectal carcinoma. **Proteomics-Clin. Appl.** 2 (12), 1586–1595. (SCI) (NSC94-2745-B-182-003-URD and NSC96-2320-B182-031-MY3)
65. Chang K-P, Hao S-P, Chang JH, Wu C-C, Tsang N-M, Lee Y-S, Hsu CL, Ueng S-H, Liang Y, Liu SC, Liu YL, Wei PC, Chang Y-S and **Yu J-S\*** (2008) Macrophage inflammatory protein-3 $\alpha$  is a novel serum marker for nasopharyngeal carcinoma detection and prediction of treatment outcomes. **Clin. Cancer Res.** 14(21):6979-6987. (SCI) (NSC94-2745-B-182-003-URD)
  66. Weng L-P, Wu C-C, Hsu B-L, Chi L-M, Liang Y, Tseng C-P, Hsieh L-L\*, and **Yu J-S\***. (2008) Secretome-based identification of Mac-2 binding protein as a potential oral cancer marker involved in cell growth and motility. **J. Proteome Res.** 7(9):3765-3775. (SCI)(NSC94-2745-B-182-003-URD and 95-2745-B-182-003-URD)
  67. Chen L-C, Hsueh C\*, Tsang N-M, Liang Y, Chang K-P, Hao S-P, **Yu J-S**, Chang Y-S\* (2008) Heterogeneous ribonucleoprotein K and thymidine phosphorylase are independent prognostic and therapeutic markers for nasopharyngeal carcinoma. **Clin. Cancer Res.** 2008 Jun 15;14(12):3807-3813. (SCI)
  68. Lin C-S, Liu N-T, Liao D-C, **Yu J-S**, Tsao C-H, Lin C-H, Sun C-W, Jane W-N, Tsay H-S, Chen JJ-W, Lai E-M, Lin N-S, Chang W-C, Lin C-C\*. (2008) Differential protein expression of two photosystem II subunits, PsbO and PsbP, in an albino mutant of *Bambusa edulis* with chloroplast DNA aberration. **J. Am. Soc. Hortic. Sci.** 2008 March 1;133 (2), 270-277. (SCI)
  69. Chang K-P, Hsu C-L, Chang Y-L, Tsang N-M, Chen C-K, Lee T-J, Tsao K-C, Huang C-G, Chang Y-S, **Yu J-S**, Hao S-P\*. (2008) Complementary serum test of antibodies to Epstein-Barr virus nuclear antigen-1 and early antigen: A possible alternative for primary screening of nasopharyngeal carcinoma. **Oral Oncol.** 2008 Aug; 44(8), 784-792. (SCI)
  70. Lee LY, Wu CM, Wang CC, **Yu JS**, Liang Y, Huang KH, Lo CH, Hwang TL\*. (2008) Expression of matrix metalloproteinases MMP-2 and MMP-9 in gastric cancer and their relation to claudin-4 expression. **Histol. Histopathol.** 2008 May;23(5), 515-521. (SCI)
  71. Chi L-M, Lee C-W, Chang K-P, Hao S-P, Lee H-M, Liang Y, Hsueh C, Yu C-J, Lee I-N, Chang Y-J, Lee S-Y, Yeh Y-M, Chang Y-S, Chien K-Y\* and **Yu J-S\***. (2009) Enhanced interferon signaling pathway in oral cancer revealed by quantitative proteome analysis of microdissected specimens using  $^{16}\text{O}/^{18}\text{O}$  labeling and integrated 2DLC-ESI-MALDI tandem MS. **Mol. Cell. Proteomics** 8:1453-1474. (SCI)
  72. Chen L-C, Liu H-P, Li H-P, Hsueh C, **Yu J-S**, Liang C-L, Chang Y-S.\* (2009) Thymidine phosphorylase mRNA stability and protein levels are increased through ERK-mediated cytoplasmic accumulation of hnRNP K in nasopharyngeal carcinoma cells. **Oncogene** 28(17):1904-15. (SCI)
  73. Dong Y, Leu Y-L, Chien K-Y and **Yu J-S\***. (2009) Separation and determination of low abundant flavonoids in *Scutellaria baicalensis* Georgi by micellar electrokinetic capillary electrophoresis. **Anal. Lett.** 42(10):1444 -57. (SCI)
  74. Wang C-L, Wang C-I, Liao P-C, Liang Y, Chen C-D, Liang Y, Chuang W-Y, Tsai Y-H, Chen H-C, Chang Y-S, **Yu J-S**, Wu C-C\*, and Yu C-J\*. (2009) Discovery of retinoblastoma-associated binding protein 46 as a novel prognostic marker for distant metastasis in non-small cell lung cancer by combined analysis of cancer cell secretome and pleural effusion proteome. **J. Proteome Res.** 8(10):4428-4440. (SCI)
  75. Wu H-Y, Tseng VSM, Chen L-C, Ping P, Chang Y-C, Tsay Y-G, **Yu J-S** and Liao P-C\*. (2009) Combining alkaline phosphatase treatment and LTQ/Orbitrap high mass accuracy LC-MS data for the efficient and confident identification of protein phosphorylation. **Anal. Chem.** 81(18):7778-87. (SCI)
  76. Fang K-H, Kao H-K, Cheng M-H, Chang Y-L, Tseng N-M, Huang Y-C, Lee L-Y, **Yu J-S**, Hao S-P, Chang K-P\*. (2009) Histological differentiation of primary oral squamous cell carcinomas in betel quid prevalent area. **Otolaryngology-Head and Neck Surgery.** 141(6):743-749. (SCI)
  77. Chang Y-H, Wu C-C, Chang K-P, **Yu J-S**, Liao P-C\*. (2009) Cell secretome analysis using hollow fiber culture system leads to the discovery of CLIC1 protein as a novel plasma marker for nasopharyngeal carcinoma. **J. Proteome Res.** 8(12):5465-5474. (SCI)
  78. Hsu R-M, Tsai M-H, Hsieh Y-J, Lyu P-C and **Yu J-S\***. (2010) Identification of MYO18A as a novel

- interacting partner of PAK2/ $\beta$ PIX/GIT1 complex and its potential function in modulating epithelial cell migration. **Mol. Biol. Cell** 21(2), 287–301. (SCI) (NSC94-2745-B-182-003-URD, 95-2745-B-182-003-URD, 96-2320-B-182-031-MY3)
79. Hung MS, Mao JH, Xu Z, Yang CT, **Yu JS**, Harvard C, Lin YC, Bravo DT, Jablons DM\*, You L\*. (2009) Cul4A is an oncogene in malignant pleural mesothelioma. **J. Cell. Mol. Med.** 2009 Nov 19. [Epub ahead of print] (SCI)
  80. Wu C-C, Hsu C-W, Chen C-D, Yu C-J, Chang K-P, Dai D-I, Liu H-P, Su W-H, Chang Y-S, and **Yu J-S\***. (2010) Candidate serological biomarkers for cancer identified from the secretomes of 23 cancer cell lines and the human protein atlas. **Mol. Cell. Proteomics** 9, 1100-1117. (SCI) (NSC96-2320-B182-031-MY3)
  81. Kao S-H, Hsu T-C, **Yu J-S**, Chen J-T, Li S-L, Lai W-X, Tzang B-S\*. (2010) Proteomic analysis for the anti-apoptotic effects of cystamine on apoptosis-prone macrophage. **J. Cell. Biochem.** 110:660–670. (SCI)
  82. Chen J-S\*, Chen K-T, Fan W-C, **Yu J-S**, Chang Y-S and Chan E-C\*. (2010) Combined analysis of survivin autoantibody and carcinoembryonic antigen biomarkers for improved detection of colorectal cancer. **Clin. Chem. Lab. Med.** 48(5):719-25. (SCI)
  83. Zhai H-L\*, Chang Y-T, Wu C-C and **Yu J-S\***. (2010) An approach to the elimination of inter-individual variability in tumor detection. **Analyst** 135, 875 – 879. 2010 March 4 [Epub ahead of print] (SCI).
  84. Chang K-P, Wu C-C, Chen H-C, Chen S-J, Peng P-H, Tsang N-M, Lee L-Y, Liu S-C, Liang Y, Lee, Y-S, Hao S-P, Chang Y-S and **Yu J-S\***. (2010) Identification of candidate nasopharyngeal carcinoma serum biomarkers by cancer cell secretome and tissue transcriptome analysis: Potential usage of cystatin A for predicting nodal stage and poor prognosis. **Proteomics** 10, 2644-2660.. (SCI) (NSC96-2320-B182-031-MY3)
  85. Kao H-K, Guo L-F, Cheng M-H, Chen I-H, Liao C-T, Fang K-H, **Yu J-S**, Chang K-P\*. (2010) Predicting postoperative morbidity and mortality by model for endstage liver disease score for patients with head and neck cancer and liver cirrhosis. **Head & Neck** 33(4):529-34. (SCI)
  86. Lin C-J, Cheng M-L, Ho H-Y, You T-H, **Yu J-S\***, and Chiu DT-Y.\* (2010) Impaired dephosphorylation process renders G6PD-deficient cells more susceptible to H<sub>2</sub>O<sub>2</sub>-induced apoptosis. **Free Radic. Biol. Med.** 49(3), 361–373. (SCI)
  87. Chen, J-S, Chen, K-T, Fan C-W, Han C-L, Chen Y-J, **Yu J-S**, Chang Y-S, Chien C-W, Wu C-P, Hung R-P, Chan E-C\*. (2010) Comparison of membrane fraction proteomic profiles of normal and cancerous human colorectal tissues with gel-assisted digestion and iTRAQ labeling mass spectrometry. **FEBS J.** 277(14), 3028-38. (SCI)
  88. Chang K-P, Chang Y-T, Wu C-C, Liu Y-L, Chen M-C, Tsang N-M, Hsu C-L, Chang Y-S, and **Yu J-S\***. (2011) Multiplexed immunobead-based profiling of cytokine markers for detection of nasopharyngeal carcinoma and prognosis of patient survival. **Head & Neck** 2011 Jun;33(6):886-97. (SCI)
  89. Hsieh Y-J, **Yu J-S\*** and Lyu P-C\*. (2010) Characterization of the photodynamic therapy-elicited responses of A431 cells with intracellular organelle-localized Photofrin. **J. Cell. Biochem.** 2010 Nov 1, 111(4):821-33. (SCI) (NSC96-2320-B-182-031-MY3)
  90. Liu H-P, Wu C-C, Kao H-Y, Huang Y-C, Liang Y, Chen C-C, **Yu J-S**, Chang Y-S\*. (2010) Proteome-wide dysregulation by PRA1 depletion delineates a role of PRA1 in lipid transport and cell migration. **Mol. Cell. Proteomics** 2010 Jun 30. [Epub ahead of print] (SCI)
  91. Wang C-I, Wang C-L, Wang C-W, Chen C-D, Wu C-C, Tsai Y-H, Chang Y-S, **Yu J-S**, and Yu C-J\*. (2011) Importin subunit alpha-2 is identified as a potential biomarker for non-small cell lung cancer by integration of cancer cell secretome and tissue transcriptome. **Int. J. Cancer** 128(10):2364-72. 2010 Jul 23. [Epub ahead of print]. (SCI)
  92. Chen J-S, Chou Y-P, Chen K-T, Hung R-P, **Yu J-S**, Chang Y-S, Chan E-C\*. (2011) Detection of annexin A autoantibodies in sera from colorectal cancer patients. **J. Clin. Gastroenterol.** 45(2):125-32. (SCI)
  93. Chen Y-T\*, Chen C-L, Chen H-W, Chung T, Wu C-C, Chen C-D, Hsu C-W, Chen M-C, Tsui K-H,



- Chang P-L, Chang Y-S, **Yu J-S\***. (2010) Discovery of novel bladder cancer biomarkers by comparative urine proteomics using iTRAQ technology. **J. Proteome Res.** 9(11):5803-15. (SCI) (NSC96-2320-B-182-031-MY3)
94. Mapes J, Chen J-T, **Yu J-S** and Xue D\*. (2010) Somatic sex determination in *C. elegans* is modulated by SUP-26 repression of tra-2 translation. **Proc Natl Acad Sci USA** 2010 Oct 19;107(42):18022-7. (SCI)
  95. Kuo YB, Fan CW, Chan CC, Hung RP, Hung YS, Chen KT, Chang CA, **Yu JS**, Chang YS, Chan EC\*. (2011) Identification of Phospholipid Scramblase 1 as a biomarker and its prognostic value for Colorectal Cancer. **Mol. Med.** 17(1-2):41-47. Epub 2010 Oct 5. (SCI)
  96. Chang K-P, Kao H-K, Yen T-C, Chang Y-L, Liang Y, Liu S-C, Lee L-Y, Chang Y-L, Kang C-J, Chen I-H, Liao C-T\*, **Yu J-S\***. (2011) Overexpression of macrophage inflammatory protein-3 $\alpha$  in oral cavity squamous cell carcinoma associated with tumor metastasis. **Oral Oncol.** 47, 108–113. 2010 Dec 15. [Epub ahead of print]. (SCI)
  97. Hsueh C, Lin J-D\*, Wu I-C, Chao T-C, **Yu J-S**, Liou M-J, Yeh C-J. (2011) Angiogenesis in papillary thyroid carcinoma: Expression of vascular endothelial growth factor, angiopoietin-1, angiopoietin-2 and Tie-2 correlated with tumor progression and prognosis **J. Sur. Oncol.** 103(5):395-9. 2010 Dec 28.[Epub ahead of print] (SCI)
  98. Han C-L, Chen J-S, Chan E-C, Wu C-P, Yu K-H, Chen K-T, Tsou C-C, Tsai C-F, Chien C-W, Kuo Y-B, Lin P-Y, **Yu J-S**, Hsueh C, Chen M-C, Chan C-C, Chang Y-S, Chen Y-J. An informatics-assisted label-free approach for personalized tissue membrane proteomics: Case study on colorectal cancer. **Mol. Cell. Proteomics** 2011 Apr;10(4):M110.003087. Epub 2011 Jan 5. (SCI)
  99. Fan CW, Chan CC, Chen KT, Twu J, Huang YS, Han CL, Chen YJ, **Yu JS**, Chang YS, Kuo YB, Chan EC\*. (2011) Identification of SEC61 $\beta$  and its autoantibody as biomarkers for colorectal cancer. **Clin. Chim. Acta.** 2011 May 12;412(11-12):887-93. Epub 2011 Jan 19. (SCI)
  100. Chang K-P, Chang Y-T, Liao C-T, Yen T-C, Chen I-H, Chang Y-L, Liu Y-L, Chang Y-S, **Yu J-S\*** and Wu C-C\*. (2011) Prognostic cytokine markers in peripheral blood for oral cavity squamous cell carcinoma identified by multiplexed immunobead-based profiling. **Clin. Chim. Acta.** 2011 May 12;412(11-12):980-7. Epub 2011 Feb 21. (SCI)
  101. Peng P-H, Wu C-C\*, Liu S-C, Chang K-P, Chen C-D, Chang Y-T, Hsu C-W, Chang Y-S, and **Yu J-S\*** (2011) Quantitative plasma proteome analysis reveals aberrant level of blood coagulation-related proteins in nasopharyngeal carcinoma. **J. Proteomics** 2011 May 1;74(5):744-57. Epub 2011 Mar 2. (SCI) (NSC 96-2320-B-182-031-MY3)
  102. Chang Y-T, Wu C-C\*, Shyr Y-M, Chen T-C, Hwang T-L, Yeh T-S, Chang K-P, Liu H-P, Liu-Y-L, Tsai, M-H, Chang Y-S, and **Yu J-S\***. (2011) Secretome-based identification of ULBP2 as a novel serum marker for pancreatic cancer detection. **PLoS ONE** 6(5), e20029. (SCI) (NSC 96-2320-B-182-031-MY3)
  103. Yu C-J, Chang K-P, Chang Y-J, Hsu C-W, Liang Y, **Yu J-S**, Chi L-M, Chang Y-S, and Wu C-C\*. (2011) Identification of guanylate-binding protein 1 as a potential oral cancer marker involved in cell invasion using omics-based analysis. **J. Proteome Res.** 10(8):3778-88. (SCI)
  104. Martel J, Young D, Young A, Wu C-Y, Chen C-D, **Yu J-S**, Young JD\*. (2011) Comprehensive proteomic analysis of mineral nanoparticles derived from human body fluids and analyzed by liquid chromatography-tandem mass spectrometry. **Anal. Biochem.** 418(1):111-25. (SCI)
  105. Yu C-J\*, Wang C-L, Wang C-I, Chen C-D, Dan Y-M, Wu C-C, Wu Y-C, Lee I-N, Tsai Y-H, Chang J-S and **Yu J-S**. (2011) Comprehensive proteome analysis of malignant pleural effusion for lung cancer biomarker discovery by using multidimensional protein identification technology. **J. Proteome Res.** 10(10):4671-82. (SCI)
  106. Chang K-P, **Yu J-S**, Chien K-Y, Lee C-W, Liang Y, Liao C-T, Yen T-C, Lee L-Y, Huang L-L, Liu S-C, Chang Y-S, Chi L-M\*. (2011) Identification of PRDX4 and P4HA2 as metastasis-associated proteins in oral cavity squamous cell carcinoma by comparative tissue proteomics of microdissected specimens using iTRAQ technology. **J. Proteome Res.** 2011 Nov 4;10(11):4935-47. Epub 2011 Sep 28. (SCI)
  107. Tsai M-H, Wu C-C, Peng P-H, Liang Y, Shiao Y-C, Chien K-Y, Chen J-T, Lin S-J, Tang R-P,



- Hsieh L-L\*, **Yu J-S\*** (2011) Identification of secretory gelsolin as a plasma biomarker associated with distant organ metastasis of colorectal cancer. **J. Mol. Med. (Berl)** 90(2), 187-200. 2011 Oct 14. [Epub ahead of print] (SCI) (NSC 96-2320-B-182-031-MY3)
108. Chen Y-T, Chen H-W, Smith DS, Liang K-H, Wu C-C, Chen C-L, Chung T, Chen M-C, Chang Y-S, Borchers CH\*, **Yu J-S\*** (2012) Multiplexed quantification of 63 proteins by multiple reaction monitoring-based mass spectrometry in human urine for discovery of potential bladder cancer biomarkers. **J. Proteomics** 75(12):3529-45. (SCI) (NSC99-2320-B-182-017-MY3, NSC99-2923-B-182-002-MY2)
  109. Pan T-L\*, Wang P-W, Huang C-C, Yeh C-T, Hu T-H, **Yu J-S.** (2012) Network analysis and proteomic identification of vimentin as a key regulator associated with the invasiveness and metastasis of human hepatocellular carcinoma cells. **J. Proteomics** 75(15):4676-92. (SCI)
  110. Wang I-S, Lu T-F, Lue C-E, Huang C-H, Yang P, Lin Y-T, Pijanswska DG, Yang C-M, Wang J-C, **Yu J-S**, Chang Y-S, and Lai C-S\* (2012). Immobilization of enzyme and antibody on ALD-HfO<sub>2</sub> EIS structure by NH<sub>3</sub> plasma treatment. **Nanoscale Res. Lett.** 7, 179. (SCI)
  111. Hsieh Y-J, Chien K-Y, Lin S-Y, Sabu S, Hsu R-M, Chi L-M, Lyu P-C, and **Yu J-S\***. (2012) Photofrin binds to procaspase-3 and mediates photodynamic treatment-triggered methionine oxidation and inactivation of procaspase-3. **Cell Death Dis.** 3: e347; doi:10.1038/cddis.2012.85. July 12 2012 (SCI)
  112. Wang C-I, Chien K-Y, Wang C-L, Liu H-P, Cheng C-C, Chang Y-S, **Yu J-S**, and Yu C-J\*. (2012) Quantitative proteomics reveals regulation of KPNA2 and its potential novel cargo proteins in non-small cell lung cancer. **Mol. Cell. Proteomics** 2012 Jul 25. [Epub ahead of print] (SCI)
  113. Hsueh C\*, Lin J-D, Chang Y-S, Hsueh S, Chao T-C, **Yu J-S**, Jung S-M, Tseng N-M, Sun J-H, Kuo S-Y. (2012) Prognostic significance of expression of pituitary tumor-transforming gene-binding factor (PBF) in papillary thyroid carcinoma. **Clin. Endocrinol. (Oxf)** 2012 Aug 13. doi: 10.1111/cen.12007. [Epub ahead of print] (SCI)
  114. Chang Y-F<sup>#</sup>, **Yu J-S<sup>#</sup>**, Chang Y-T, Su L-C, Li Y-C, Wu C-C, Chang Y-S, Lai C-S, Chou C\* (2012). The utility of a high-throughput scanning biosensor in the detection of the pancreatic cancer marker ULBP2. **Biosens. Bioelectron.** 2012 Aug 23. [Epub ahead of print] (SCI) <sup>#</sup>Equal contributions to this research
  115. Chen C-L, Lai Y-F, Tang P, Chien K-Y, **Yu J-S**, Tsai C-H, Chen H-W, Wu C-C, Chung T, Hsu C-W, Chen C-D, Chang Y-S, Chang P-L, and Chen Y-T\*. (2012) Comparative and targeted proteomic analyses of urinary microparticles from bladder cancer and hernia patients. **J. Proteome Res.** 11(12):5611-29. (SCI)
  116. Chen L-C, Liu M-Y, Hsiao Y-C, Choong W-K, Wu H-Y, Hsu W-L, Liao P-C\*, Sung T-Y\*, Tsai S-F\*, **Yu J-S\***, Chen Y-J\* (2013) Decoding the disease-associated proteins encoded in the human Chromosome 4. **J Proteome Res.** 12(1):33-44. (SCI)
  117. Hsuuw Y-D, Chan W-H\*, **Yu J-S** (2013) Ochratoxin A inhibits mouse embryonic development by activating a mitochondrion-dependent apoptotic signaling pathway. **Int. J. Mol. Sci.** 2013 Jan 7;14(1):935-53. (SCI)
  118. Dong Y-M, Chien K-Y, Cheng J-T, Wang TCV, Lin S-J, **Yu J-S\*** (2013) Site-specific separation and detection of phosphopeptide isomers with pH-mediated stacking capillary zone electrophoresis-coupled electrospray ionization-tandem mass spectrometry. **J. Sep. Sci.** 36(9-10):1582-9. (SCI) (NSC101-2325-B-182-011, NSC99-2923-B-182-002-MY2)
  119. Lin Y-H\*, Chen Y-J, Lai C-S\*, Chen Y-T, Chen C-L, **Yu J-S**, and Chang Y-S (2013) A negative-pressure-driven microfluidic chip for the rapid detection of a bladder cancer biomarker in urine using bead-based ELISA. **Biomicrofluidics** 7 (2), 024103 (SCI)
  120. Chen C-L, Lin T-S, Tsai C-H, Wu C-C, Chung T, Chien K-Y, Wu M, Chang Y-S, **Yu J-S\***, and Chen Y-T\* (2013) Identification of potential bladder cancer markers in urine by abundant-protein depletion coupled with quantitative proteomics. **J. Proteomics** 85:28-43. doi: 10.1016/j.jprot.2013.04.024. (SCI) (NSC99-2320-B-182-017-MY3, NSC99-2923-B-182-002-MY2)
  121. Wang RY\*, Kuo R-L, Ma W-C, Huang H-I, **Yu J-S**, Yen S-M, and Huang C-R, Shih S-R (2013) Heat shock protein-90-beta facilitates enterovirus 71 viral particles assembly. **Virology**

- 443(2):236-47. (SCI)
122. Chang K-P, Wang C-L A, Kao H-K, Liang Y, Liu S-C, Huang L-L, Hseuh C, Hsieh Y-J, Chien K-Y, Chang Y-S, **Yu J-S**, Chi L-M\*. (2013) Overexpression of caldesmon is associated with nodal metastasis and poorer prognosis in oral cavity squamous cell carcinomas. **Cancer** In press. (SCI)
  123. Chen J-T, Ho C-W, Chi L-M, Chien K-Y, Hsieh Y-J, Lin S-J, **Yu J-S**\*. (2013) Identification of the P-STM antibody-recognizable phosphoepitope on lamins A/C in mitotic HeLa S3 cells. **BMC Biochem.** 14(1):18. (SCI) (NSC101-2325-B-182-011)
  124. Lin S-J, Chang K-P, Hsu C-W, Chi L-M, Chien K-Y, Liang Y, Tsai M-H, Lin Y-T, **Yu J-S**\*. (2013) Low-molecular-mass secretome profiling identifies C-C motif chemokine 5 as a potential plasma biomarker and therapeutic target for nasopharyngeal carcinoma. **J. Proteomics** 2013 Dec 6; 94, 186-201. (SCI) (NSC99-2320-B-182-017-MY3, NSC102-2325-B-182-010)
  125. Tseng S-P, Teng S-H, Lee P-S, Wang C-F, **Yu J-S**, Lu P-L\*. (2013) Rapid identification of *M. abscessus* and *M. massiliense* by MALDI-TOF mass spectrometry with a comparison to sequencing methods and antimicrobial susceptibility patterns. **Future Microbiol.** 2013 Nov; 8:1381-9. (SCI)
  126. Wang H-J, Hsieh Y-J, Cheng W-C, Lin C-P, Lin Y, Yang S-F, Chen C-C, Izumiya Y, **Yu J-S**, Kung H-J\*, Wang W-C\*. (2014) JMJD5 regulates PKM2 nuclear translocation and reprograms HIF-1 $\alpha$ -mediated glucose metabolism. **Proc Natl Acad Sci USA** 2014 Jan 7; 111(1):279-84. (SCI)
  127. Hsu C-W, **Yu J-S**, Peng P-H, Liu S-C, Chang Y-S, Chang K-P\*, and Wu C-C\* (2014) Secretomic profiling of primary cells reveals THBS2 as a salivary biomarker of oral cavity squamous cell carcinoma. **J. Proteome Res.** 2014 Nov 7;13(11):4796-807. (SCI)
  128. Chen C-D, Wang C-L, Yu C-J, Chien K-Y, Chen Y-T, Chen M-C, Chang Y-S, Wu C-C\*, and **Yu J-S**\* (2014) Targeted proteomic pipeline reveals diagnostic biomarkers for malignant pleural effusion of lung cancer. **J. Proteome Res.** 2014 Jun 6; 13(6):2818-29. (SCI) (NSC101-2325-B-182-011, NSC99-2923-B-182-002-MY2)
  129. Fang K-H, Kao H-K, Chi L-M, Liang Y, Liu S-C, Hseuh C, Liao C-T, Yen T-C, **Yu J-S**, Chang K-P\*. (2014) Overexpression of BST2 is associated with nodal metastasis and poorer prognosis in oral cavity cancer. **Laryngoscope** 2014 Sep;124(9):E354-60. (SCI)
  130. Wu C-C\*<sup>#</sup>, Chang Y-T<sup>#</sup>, Chang K-P, Liu Y-L, Liu H-P, Lee I-L, Yu J-S, and Chiang W-F\*. (2014) Salivary auto-antibodies as noninvasive diagnostic markers of oral cavity squamous cell carcinoma. **Cancer Epidemiol Biomarkers Prev** 2014 Aug;23(8):1569-78. doi: 10.1158/1055-9965.EPI-13-1269. Epub 2014 May 23 (SCI)(NSC102-2325-B-182-010)
  131. Juo C-G\*, Chen C-L, Fu S-H, Lin S-T, Chen Y-T, Chang Y-S, and **Yu J-S**. (2014) Mass accuracy improvement of reversed-phase liquid chromatography/electrospray ionization mass spectrometry based urinary metabolomic analysis by post-run calibration using sodium formate cluster ions. **Rapid Commun Mass Spectrom** 28(16), 1813–1820. (SCI)
  132. Hsu R-M, Hsieh Y-J, Yang T-H, Chiang Y-C, Kan C-Y, Lin Y-T, Chen J-T, and **Yu J-S**\*. (2014) Binding of the extreme carboxyl-terminus of PAK-interacting exchange factor  $\beta$  ( $\beta$ PIX) to myosin 18A (MYO18A) is required for epithelial cell migration. **BBA-Mol Cell Res.** 1843 (11), 2513-2527. (SCI) (NSC99-2923-B-182-002-MY2, NSC101-2325-B-182-011)
  133. Chiang S-F, Tsai M-H, Tang R, Hsieh L-L, Chiang J-M, Yeh C-Y, Hsieh P-S, Tsai W-S, Liu Y-P, Liang Y, Chen J-S\* and **Yu J-S**\* (2014) Membrane proteins as potential colon cancer biomarkers: verification of 4 candidates from a secretome dataset. **Surgical Science** 5(10), 418-438.
  134. Gopinath RK<sup>†</sup>, You ST<sup>†</sup>, Chien KY<sup>†</sup>, Swamy KB, **Yu JS**, Schuyler SC\*, Leu JY\* (2014) The Hsp90-dependent proteome is conserved and enriched for hub proteins with high levels of protein-protein connectivity. **Genome Biol. Evol.** 6(10):2851–2865. (<sup>†</sup>equal contribution) (SCI)
  135. Chao M\*, Wang HN, Lu YJ, Chang YS, **Yu JS** (2015) A V-val subtype Epstein-Barr virus nuclear antigen 1 promotes cell survival after serum withdrawal. **Oncol. Rep.** 33(2):958-66. (SCI)
  136. Liu PJ, Chen CD, Wang CL, Wu YC, Hsu CW, Lee CW, Huang LH, **Yu JS**, Chang YS, Wu CC\*, Yu CJ.\* (2015) In-depth proteomic analysis of six types of exudative pleural effusions for non-small cell lung cancer biomarker discovery. **Mol. Cell Proteomics.** 2015 Jan 31. pii: mcp.M114.045914. [Epub ahead of print] (SCI)
  137. Wu H, Wei L, Fan F, Ji S, Zhang S, Geng J, Hong L, Fan X, Chen Q, Tian J, Jiang M, Sun X, Jin C,

- Yin YZ, Liu Q, Zhang J, Qin F, Lin KH, **Yu JS**, Deng X, Wang HR, Zhao B, Johnson RL, Chen L\*, Zhou D\* (2015) Integration of Hippo signaling and the unfolded protein response to restrain liver overgrowth and tumorigenesis. **Nat. Commun.** 2015 Feb 19; 6:6239. (SCI)
138. Wang C-I, Wang C-L, Wu Y-C, Feng H-P, Liu P-J, Chang Y-S, **Yu J-S**, and Yu C-J\* (2015) Quantitative proteomics reveals a novel role of karyopherin alpha 2 (KPNA2) in cell migration through the regulation of vimentin-pErk protein complex levels in lung cancer. **J. Proteome Res.** 2015 Apr 3;14(4):1739-51. (SCI)
139. Kuo R-L\*, Lin Y-H, Robert Wang R.Y-L, Hsu C-W, Chiu Y-T, Huang H-I, Kao L-T, **Yu J-S**, Shih S-R, and Wu C-C\* (2015) Proteomics analysis for EV71-infected cells reveals the involvement of host protein NEDD4L in EV71 replication. **J. Proteome Res.** 2015 Apr 3;14(4):1818-30. (SCI)
140. Chang K-P, Lin S-J, Liu S-C, Yi J-S, Chien K-Y, Chi L-M, Kao H-K, Liang Y, Lin Y-T, Chang Y-S, **Yu J-S\*** (2015) Low-molecular-mass secretome profiling identifies HMGA2 and MIF as prognostic biomarkers for oral cavity squamous cell carcinoma. **Scientific Reports** 2015 Jul 3; 5:11689. (SCI) (MOST102-2628-B-182-013-MY3, MOST103-2325-B-182-003)
141. Lee C-W, Chang K-P, Chen Y-Y, Liang Y, Hsueh C, **Yu J-S**, Chang Y-S, and Yu C-J\*. (2015) Overexpressed tryptophanyl-tRNA synthetase, an angiostatic protein, enhances oral cancer cell invasiveness. **Oncotarget.** 2015 Jun 17. [Epub ahead of print] (SCI)
142. Chen C-L, Chung T, Wu C-C, Ng K-F, **Yu J-S**, Tsai C-H, Chang Y-S, Liang Y, Chen Y-T\* (2015) Comparative tissue proteomics of microdissected specimens reveals novel candidate biomarkers of bladder cancer. **Mol Cell Proteomics.** 2015 Jun 16. pii: mcp.M115.051524. [Epub ahead of print] (SCI)
143. Chiang S-F, Kan C-Y, Hsiao Y-C, Tang R, Hsieh L-L, Chiang J-M, Tsai W-S, Yeh C-Y, Hsieh P-S, Liang Y, Chen J-S, **Yu J-S\*** (2015) Bone marrow stromal antigen 2 is a novel plasma biomarker and prognosticator for colorectal carcinoma — A secretome-based verification study. **Disease Markers** 2015; 2015:874054. (SCI) (MOST102-2628-B-182-013-MY3, MOST103-2325-B-182-003)
144. Wu C-P\*, Hsieh Y-J, Hsiao S-H, Su C-Y, Li Y-Q, Huang Y-H, Huang C-W, Hsieh C-H, **Yu J-S** and Wu Y-S\*. (2016) Human ATP-Binding Cassette transporter ABCG2 confers resistance to CUDC-907, a dual inhibitor of histone deacetylase and phosphatidylinositol 3-kinase. **Mol. Pharm.** 2016 Mar 7;13(3):784-94. (SCI)
145. Wang C-I, Chan Y-Y, Wang C-L, **Yu J-S**, Chang Y-S, and Yu C-J\*. (2016) mTOR regulates proteasomal degradation and Dp1/E2F1-mediated transcription of KPNA2 in lung cancer cells. **Oncotarget** 2016 May 3;7(18):25432-42. (SCI)
146. Chen H#, Hsiao Y-C#, Chiang S-F, Wu C-C, Lin Y-T, Liu H, Zhao H, Chen J-S, Chang Y-S, and **Yu J-S\***. (2016) Quantitative analysis of wild-type and V600E mutant BRAF proteins in colorectal carcinoma using immunoenrichment and targeted mass spectrometry. **Anal. Chim. Acta** 2016 Aug 24; 933:144-55. (SCI) (MOST102-2628-B-182-013-MY3, MOST104-2325-B-182-003)
147. Hsu CH, Hsu CW, Hsueh C, Wang CL, Wu YC, Wu CC, Liu CC, **Yu JS**, Chang YS, Yu CJ.\* (2016) Identification and characterization of potential biomarkers by quantitative tissue proteomics of primary lung adenocarcinoma. **Mol. Cell. Proteomics** 2016 Jul;15(7):2396-410. (SCI)
148. **Yu JS**<sup>#</sup>, Chen YT<sup>#</sup>, Chiang WF<sup>#</sup>, Hsiao YC<sup>#</sup>, Chu LJ<sup>#</sup>, See LC, Wu CS, Tu HT, Chen HW, Chen CC, Liao WC, Chang YT, Wu CC, Lin CY, Liu SY, Chiou ST, Cha SL, Chang KP, Chien CY, Chang SW, Chang CJ, Young JD, Pao CC, Chang YS\*, Hartwell LH\* (2016) Saliva Protein Biomarkers to Detect Oral Squamous Cell Carcinoma in a High-Risk Population in Taiwan. **Proc Natl Acad Sci USA.** 2016 Oct 11;113(41):11549-11554. (<sup>#</sup>Co-first authors) (SCI) (MOST 103-2325-B-182-003 and 104-2325-B-182-003)
149. Chung I-C, OuYang C-N, Yuan S-N, Li H-P, Chen J-T, Shieh H-R, Chen Y-J, Ojcius DM, **Yu J-S**, Chang Y-S, Chen L-C\*. (2016) Pyk2 activates the NLRP3 inflammasome by directly phosphorylating ASC and contributes to inflammasome-dependent peritonitis. **Scientific Reports** 2016 Oct 31;6:36214. (SCI)
150. Lin YT, Chien KY, Wu CC, Chang WY, Chu LJ, Yeh CT\*, **Yu JS\***. (2017) Super-SILAC mix

- coupled with SIM/AIMS assays for targeted verification of phosphopeptides discovered in a large-scale phosphoproteome analysis of hepatocellular carcinoma. **J. Proteomics**. 2017 Mar 22;157:40-51. (SCI) (MOST 103-2325-B-182-003 and 104-2325-B-182-003)
151. Chen Y-T\*, Chen H-W, Wu C-F, Chu L-J, Chiang W-F, Wu C-C, **Yu J-S**, Tsai C-H, Liang K-H, Chang Y-S, Wu M, Ou Yang W-T. (2017) Development of a multiplexed LC-MRM/MS method for evaluation of salivary proteins as oral cancer biomarkers. **Mol. Cell. Proteomics** 2017 May;16(5):799-811. (SCI)
  152. Shao CH, Chen CL, Lin JY, Chen CJ, Fu SH, Chen YT, Chang YS, **Yu JS**, Tsui KH, Juo CG\*, Wu KP\*. (2017) Metabolite marker discovery for the detection of bladder cancer by comparative metabolomics. **Oncotarget**. 2017 Mar 21. 2017; 8:38802-38810 doi: 10.18632/oncotarget.16393.
  153. Hsieh Y-J#, Chien K-Y#, Yang I-F, Lee I-N, Wu C-C, Huang T-Y, and **Yu J-S\*** (2017) Oxidation of protein-bound methionine in Photofrin-photodynamic therapy-treated human tumor cells explored by methionine-containing peptide enrichment and quantitative proteomics approach. **Scientific Reports** 2017 May 2;7(1):1370. doi: 10.1038/s41598-017-01409-9. (MOST102-2628-B-182-013-MY3, MOST104-2325-B-182-003)
  154. Cheng JC\*, Tseng CP, Liao MH, Peng CY, **Yu JS**, Chuang PH, Huang JT, Chen JJW. (2017) Activation of hepatic stellate cells by the ubiquitin C-terminal hydrolase 1 protein secreted from hepatitis C virus-infected hepatocytes. **Scientific Reports**. 2017 June 30;7:4448. doi:10.1038/s41598-017-04259-7 (MOST105-2320-B-182-030)
  155. Peng Y#, Zhang M#, Zheng L#, Liang Q#, Li H#, Chen J-T, Guo H, Yoshina S, Chen Y-Z, Zhao X, Wu X, Liu B, Mitani S, **Yu J-S**, Ding Xue\*. (2017) Cysteine protease cathepsin B mediates radiation-induced bystander effects. **Nature** 547(7664), 458–462 (27 July 2017)
  156. Hsiao YC#, Chu LJ#, Chen JT, Yeh TS and **Yu JS\***. (2017) Proteomic profiling of the cancer cell secretome: informing clinical research. **Expert Review of Proteomics** (Invited review article) 2017 Sep;14(9):737-756. (MOST 104-2325-B-182-003, MOST 105-2325-B-182-001)
  157. Chen TW#, Lee CC#, Liu H#, Wu CS#, Pickering CR#, Huang PJ, Wang J, Chang IY, Yeh YM, Chen CD, Li HP, Luo JD, Tan BC, Chan TEH, Hsueh C, Chu LJ, Chen YT, Zhang B, Yang CY, Wu CC, Hsu CW, See LC, Tang P, **Yu JS**, Liao WC, Chiang WF, Rodriguez H, Myers JN, Chang KP\*, Chang YS\*. (2017) APOBEC3A is an oral cancer prognostic biomarker in carriers of an APOBEC deletion polymorphism. **Nature Communications**. 2017 Sep 6;8(1):465. (MOST102-2628-B-182A-012-MY3, MOST103-2632-B-182-001; MOST 104-2632-B-182-001 and MOST 105-2632-B-182-001)
  158. Hsiao Y-C, Chi L-M, Chien K-Y, Chiang W-F, Chen S-F, Chuang Y-N, Lin S-Y, Wu C-C, Chu LJ, Chen Y-T, Chia S-L, Chien C-Y, Chang K-P, Chang Y-S, and **Yu J-S\***. (2017) Development of a multiplexed assay for oral cancer candidate biomarkers using peptide immunoaffinity enrichment and targeted mass spectrometry. **Mol. Cell. Proteomics** 2017 Oct;16(10):1829-1849. (MOST 103-2325-B-182-003 and MOST 104-2325-B-182-003)
  159. Liu CC, You CH, **Yu JS\***, Huang GJ, Liu CH, Wang PJ, and Lin CC\*. (2017) Analysis of the efficacy of Taiwanese freeze neurotoxic antivenom against Southeast Asian cobra venoms through proteomics and animal model approaches. **PLOS Neglected Tropical Disease**. 2017 Dec 15;11(12): e0006138. (MOST 104-2325-B-182-003, 105-2325-B-182-001)
  160. Wu CC#, Lin JD#, Chen JT, Chang CM, Weng HF, Hsueh C, Chien HP and **Yu JS\***. (2018) Integrated analysis of fine-needle-aspiration cystic fluid proteome, cancer cell secretome, and public transcriptome datasets for papillary thyroid cancer biomarker discovery. **Oncotarget** 9:12079-12100. (MOST 103-2325-B-182-003, 104-2325-B-182-003,)
  161. Hsiao YC#, Chu LJ#, Chen YT, Chi LM, Chien KY, Chiang WF, Chang YT, Chen SF, Wang WS, Chuang YN, Lin SY, Chien CY, Chang KP, Chang YS, and **Yu JS\***. (2018) Variability assessment of 90 salivary proteins in intra-day and inter-day samples from healthy donors by multiple reaction monitoring-mass spectrometry. (2018) **Proteomics-Clin Appl**. 2018 Mar;12(2). doi: 10.1002/prca.201700039. (MOST 104-2325-B-182-003 and MOST 105-2325-B-182-001)
  162. Lai YH, Liu H, Chiang WF, Chen TW, Chu LJ, **Yu JS**, Chen SJ, Chen HC, and Tan BC\*. (2018) MiR-31-5p-ACOX1 axis enhances tumorigenic fitness in oral squamous cell carcinoma via the

- promigratory prostaglandin E2. **Theranostics** 2018 Jan 1;8(2):486-504.
163. Tsai C-H#, Chen Y-T\*,#, Chang Y-H#, Hsueh C, Liu C-Y, Chang Y-S, Chen C-L\*, **Yu J-S\*** (2018) Systematic verification of bladder cancer-associated tissue protein biomarker candidates in urine specimens. **Oncotarget** In press.
  164. Chu LJ#, Hsiao YC#, Chiang WF#, Tsai CJ, Lin SY, Chang KP, Chien CY, **Yu JS\***. (2018) Use of saliva protein biomarkers for diagnosis of oral cavity cancer. **International Journal of Head and Neck Science** (Invited review article) In press. (MOST 105-2325-B-182-001 and 106-2320-B-182-029-MY3)
  165. Chen C-T, Liu C-C, **Yu J-S**, Li H-H, Lai M-C\*. (2018) Integrated omics profiling identifies hypoxia-regulated genes in HCT116 colon cancer cells **J. Proteomics** 188:139-151.
  166. Huang Y-H, Lin K-H, **Yu J-S**, Wu T-J, Lee W-C, Chao C-K, Pan T-L, Yeh C-T\*. (2018) Targeting HSP60 by subcutaneous injections of jetPEI/HSP60-shRNA destabilizes cytoplasmic survivin and inhibits hepatocellular carcinoma growth. **Mol. Carcinog.** 2018 Apr 19. 57:1087–1101.
  167. Liu C-C#, Lin C-C#, Hsiao Y-C, Wang P-J, **Yu J-S\***. (2018) Proteomic characterization of six Taiwanese snake venoms: Identification of species-specific proteins and development of a SISCAPA-MRM assay for cobra venom factors. **J. Proteomics** 2018 Sep 15, 187:59-68. (MOST 106-2632-B-182-002 and 106-2320-B-182-029-MY3).
  168. Wu CP\*, Hsieh YJ, Murakami M, Vahedi S, Hsiao SH, Yeh N, Chou AW, Li YQ, Wu YS, **Yu JS**, Ambudkar SV. (2018) Human ATP-binding cassette transporters ABCB1 and ABCG2 confer resistance to histone deacetylase 6 inhibitor ricolinostat (ACY-1215) in cancer cell lines. **Biochem Pharmacol.** 2018 Jul 17. 155:316-325.
  169. Lin W-C, Chakraborty A, Huang S-C, Wang P-Y, Hsieh Y-J, Chien K-Y, Lee Y-H, Chang C-C, Tang H-Y, Lin Y-T, Tung C-S, Luo J-D, Chen T-W, Lin T-Y, Cheng M-L, Chen Y-T, Yeh C-T; Liu J-L, Sung L-Y, Shiao M-S, **Yu J-S**, Chang Y-S, Pai L-M\*. (2018) Histidine-dependent protein methylation is required for compartmentalization of CTP synthase. **Cell Reports** 2018 Sep 4;24(10):2733-2745.e7.
  170. Liu C-C#, **Yu J-S**#, Wang P-J, Hsiao Y-C, Liu C-H, Chen Y-C, Lai P-F, Hsu C-P, Fann W-C, Lin C-C\*. (2018) Development of sandwich ELISA and lateral flow strip assays for diagnosing clinically significant snakebite in Taiwan. **PLOS Neglected Tropical Diseases.** 2018 Dec 3;12(12):e0007014. #Contributed equally (MOST 106-2632-B-182-002 and 106-2320-B-182-029-MY3)
  171. Lee C-C#, Hsieh Y-J#, Chen S-W, Fu S-H, Hsu C-W, Wu C-C, Han W, Li Y, Tao H, Chang Y-S, **Yu J-S**, Li L\*, Chang C-H\*, Chen Y-T\*. (2018) Bretschneider solution-induced alterations in the urine metabolome in cardiac surgery patients. **Scientific Reports** 2018 Dec 11;8(1):17774.
  172. Lin Y-H\*, Chang H-Y, Wu C-C, Wu C-W, Chang K-P, **Yu J-S\***. (2019). BRAF protein immunoprecipitation, elution, and digestion from cell extract using a microfluidic mixer for mutant BRAF protein quantification by mass spectrometry. **Anal. Bioanal. Chem.** 2019 Feb;411(5):1085-1094. doi: 10.1007/s00216-018-1536-2. Epub 2019 Jan 2.
  173. Hsu C-W#, Chen Y-T#, Hsieh Y-J, Chang K-P, Hsueh P-C, **Yu J-S**, Chang Y-S, Li L\*, Wu C-C\* (2019) Integrated analyses utilizing metabolomics and transcriptomics reveal perturbation of the polyamine pathway in oral cavity squamous cell carcinoma. **Analytica Chimica Acta** 2019 Mar 7;1050:113-122. doi: 10.1016/j.aca.2018.10.070. Epub 2018 Nov 2.
  174. Wang P#, Geng J#, Gao J, Zhao H, Li J, Shi Y, Yang B, Xiao C, Linghu Y, Sun X, Chen X, Hong L, Qin F, Li X, **Yu JS**, You H, Yuan Z, Zhou D, Johnson RL, Chen L\* (2019) Macrophage achieves self-protection against oxidative stress-induced ageing through Mst-Nrf2 axis. **Nature Communications** 2019 Feb 14;10(1):755. doi: 10.1038/s41467-019-08680-6.
  175. Chou PH, Liao WC; Tsai KW, Chen KC **Yu JS**, Chen TW\*. (2019) TACCO, a database connecting transcriptome alterations, pathway alterations and clinical outcomes in cancers. **Scientific Reports** 2019 Mar 7;9(1):3877. doi: 10.1038/s41598-019-40629-z.
  176. Chen Y-T\*, Huang H-C, Hsieh Y-J, Fu S-H, Li L, Chen C-L, Chu L-J, **Yu J-S**. (2019) Targeting amine- and phenol-containing metabolites in urine by dansylation isotope labeling and liquid chromatography mass spectrometry for evaluation of bladder cancer biomarkers. **J. Food Drug**

- Anal.** 2019 Apr; 27(2):460-474. doi: 10.1016/j.jfda.2018.11.008. Epub 2019 Jan 7.
177. Chen Y-T\*, Tsai C-H, Chen C-L, **Yu J-S**, Chang Y-H\*. (2019) Development of biomarkers of genitourinary cancer using mass spectrometry-based clinical proteomics. **J. Food Drug Anal.** 2019 Apr; 27(2):387-403. doi: 10.1016/j.jfda.2018.09.005. Epub 2018 Oct 27.
  178. **Yu J-S**. (2019) From discovery of tyrosine phosphorylation to targeted cancer therapies: The 2018 Tang Prize in Biopharmaceutical Science. **Biomedical Journal** 2019 Apr; 42(2), 80-83 doi: 10.1016/j.bj.2019.03.004. Epub 2019 Apr 30. (Invited article).
  179. Lin WR\*, Chiang JM, Lim SN, Su MY, Chen TH, Huang SW, Chen CW, Wu RC, Tsai CL, Lin YH, Alison MR, Hsieh SY, **Yu JS**, Chiu CT, Yeh CT. (2019) Dynamic bioenergetic alterations in colorectal adenomatous polyps and adenocarcinomas. **EBioMedicine**. 2019 Jun;44:334-345. doi: 10.1016/j.ebiom.2019.05.031. Epub 2019 May 20.]
  180. Chi LM#, Hsiao YC#, Chien KY#, Chen SF, Chuang YN, Lin SY, Wang WS, Chang IYF, Yang C, Chu LJ, Chiang WF, Chien CY, Chang YS, Chang KP\*, **Yu JS\***. (2020) Assessment of candidate biomarkers in paired saliva and plasma samples from oral cancer patients by targeted mass spectrometry. **J Proteomics**. 2020 Jan 16;211:103571. doi: 10.1016/j.jprot.2019.103571. Epub 2019 Nov 2.
  181. Hsiao YC, Lin SY, Chien KY, Chen SF, Wu CC, Chang YT, Chi LM, Chu LJ, Chiang WF, Chien CY, Chang KP, Chang YS, **Yu JS\*** (2020) An immuno-MALDI mass spectrometry assay for the oral cancer biomarker, matrix metalloproteinase-1, in dried saliva spot samples. **Analytica Chimica Acta** 1100:118-130. doi: 10.1016/j.aca.2019.12.006. Epub 2019 Dec 3.
  182. Chien-Chun Liu#, Yu-Shao Chou#, Chun-Yu Chen, Kuei-Lin Liu, Guo-Jen Huang, **Yu JS**, Cho-Ju Wu, Geng-Wang Liaw, Cheng-Hsien Hsieh\*, and Chun-Kuei Chen\*. (2020) Pathogenesis of local necrosis induced by Naja atra venom: Assessment of the neutralization ability of Taiwanese freeze-dried neurotoxic antivenom in animal models. **PLOS Neglected Tropical Diseases**. In press.

### 邀請演講(Invited Lectures)

- 2001-02-10 --- The phospho-epitope-specific antibody against p21-activated kinase (PAK): Possible application in screening PAK inhibitors and searching for kinase substrates. 2001-02-10, The NHRI Conference on Signal Transduction, Tao-Yuan, Taiwan.
- 2001-03-16 --- p21-activated kinase 2 (PAK2): Molecular regulation mechanism and its possible role in stress-induced apoptotic signaling. 2001-03-16, Department of Medical Research and Education, Taipei Veterans General Hospital, Taipei, Taiwan
- 2001-06-01 --- p21-activated kinase 2 (PAK2): Molecular regulation mechanism and its possible role in stress-induced apoptotic signaling. 2001-06-01, Department of Life Sciences, National Central University, Tao-Yuan, Taiwan.
- 2001-07-09 --- LMP 1 of EBV Induces Expression of Inducible Nitric Oxide Synthase and Promotes Stress-Induced Apoptosis in Balb/c 3T3 Fibroblasts. 2001-07-09, The NHRI Symposium on Epstein-Barr Virus and Associated Diseases, Taipei, Taiwan.
- 2001-11-26 --- p21-activated kinase 2 (PAK2): Molecular regulation mechanism and its possible role in stress-induced apoptotic signaling. 2001-11-26, Department of Biology, Tunghai University, Tai-Chung, Taiwan.
- 2003-03-19 --- Cell death mechanism in human epidermoid carcinoma A431 cells triggered by photodynamic therapy with Photofrin®. 2003-03-19, Yuan Ze University, Tao-Yuan, Taiwan.
- 2003-05-16 --- Cell death mechanism in human epidermoid carcinoma A431 cells triggered by photodynamic therapy with Photofrin®. 2003-05-16, Department of Biological Science, Chung Shan Medical University, Tai-Chung, Taiwan.
- 2003-10-26 --- Death signaling in human epidermal carcinoma A431 cells induced by Photofrin-based photodynamic therapy. 2003-10-26, 2003 BioPhotonics Symposium, Laser and Photonics Medicine Society of The Republic of China, Taipei, Taiwan
- 2003-11-25 --- p21-activated kinase 2 (PAK2): Molecular regulation mechanism and possible biological

- functions. 2003-11-25, Department of life Sciences, National Chiao Tung University, Hsinchu, Taiwan.
- 2004-03-19 --- Modulation of tumor cell death by photodynamic therapy (PDT). 2004-03-19, Graduate Institute of Basic Medical Sciences, Chang Gung University, Tao-Yuan, Taiwan.
- 2004-05-26 --- Cancer Cell's Secreted Proteome as A Basis for Searching Potential Tumor Markers - Nasopharyngeal Carcinoma as A Model. 2004-05-26, The 9th Symposium on Recent Advances in Biophysics, Academia Sinica, Taipei, Taiwan.
- 2004-06-06 --- Cancer Cell's Secreted Proteome as A Basis for Searching Potential Tumor Markers - Nasopharyngeal Carcinoma as A Model. 2004-06-06, The 5<sup>th</sup> NHRI Conference on Nasopharyngeal Carcinoma and Herpesvirus Associated Diseases, Tao-Yuan, Taiwan.
- 2004-07-16 --- A reverse approach for potential cancer marker discovery based on cancer cell's secreted proteome. 2004-07-16, Department of Medical Research and Education, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan
- 2005-11-29 --- Looking for potential biomarkers of nasopharyngeal carcinoma---An example of the activities carried out in Chang-Gung Proteomics Core Laboratory. 2005-11-29, Department of Research Affairs, China Medical University, Tai-Chung, Taiwan
- 2006-06-22 --- Application of Proteomic Technology Platforms in Searching Tumor Biomarker. 2006-06-22, 3<sup>rd</sup> Annual Meeting of Taiwan Society of Mass Spectrometry, Kaohsiung, Taiwan
- 2006-10-18 --- Application of proteomic technology platforms for tumor biomarker discovery. 2006-10-18, College of Medicine, National Taiwan University, Taipei, Taiwan.
- 2006-11-02 --- Applications of mass spectrometry in cancer biomarker research. 2006-11-02, Department of Applied Chemistry, National University of Kaohsiung, Kaohsiung, Taiwan
- 2006-11-02 --- Proteomic approaches for cancer biomarker discovery. 2006-11-02, Department of Biochemistry, Kaohsiung Medical University, Kaohsiung, Taiwan
- 2006-11-12 --- Cancer Cell-Secreted Proteomes as a Basis for Searching Potential Tumor Markers. 2006-11-12, 99<sup>th</sup> Annual Meeting of Taiwan Medical Society, at Taipei, Taiwan
- 2006-12-20 --- Integration of laser capture microdissection (LCM), <sup>16</sup>O/<sup>18</sup>O isotopic labeling and LC-MS/MS for tumor biomarker discovery. 2006-12-20, Annual Meeting of Taiwan Proteomic Society, at Taipei, Taiwan.
- 2007-05-30 --- Applications of mass spectrometry-based proteomics in biomedical research. 2007-05-30, Department of Biological Science, Chung Shan Medical University, Tai-Chung, Taiwan
- 2007-05-24 --- Mass Spectrometry-Based Proteomic Approaches for Cancer Biomarker Discovery. 2007-05-24, Department of Chemistry, National Taiwan University. Taipei, Taiwan.
- 2007-09-02 --- Proteomic Approaches for Cancer Biomarker Discovery. 2007-09-02, Tenth Annual Meeting of Breast Cancer Society of Taiwan 2007. Taipei, Taiwan
- 2007-11-05 --- Analysis of protein kinase inhibitory activities from the seeds of *Livistona chinensis* R. Brown and their effects on human cancer cell lines. 2007-11-05, International Symposium and workshop on Proteomics: Application of proteomics on the development of functional foods. Department of Life Science, National Cheng Kung University, Tainan, Taiwan.
- 2007-11-07 --- Mass spectrometry-based proteomic approaches for cancer biomarker discovery. 2007-11-07, Department of Chemistry, National Sun Yat-sen University. Kaohsiung, Taiwan
- 2007-12-04 --- Cancer Biomarker Discovery by Comparative Analysis of Cancer Cell Secretomes and Paired Serum Samples from Xenograft Mouse Model. 2007-12-04, Taiwan Proteomics Society International Conference 2007 (TPSIC2007) NCKU, Tainan, Taiwan.
- 2008-06-27 --- Identification of potential oral cancer biomarkers by qualitative cancer cell secretome analysis and quantitative tissue protein analysis. 2008-06-27, 2008 TSMS meeting, Academia Sinica, Taipei, Taiwan.
- 2008-12-04 --- Secretome-based identification of potential cancer biomarkers. 2008-12-04, 2008 Taiwan-Japan Proteomics Symposium. Academia Sinica, Taipei, Taiwan
- 2008-12-06 --- Discovery of Potential Oral cancer Biomarkers by Qualitative Cancer Cell Secretome Analysis and Quantitative Tissue Protein Analysis. 2008-12-06, Asia-Pacific Congress on Oral Cavity Cancer in Conjunction with the 12<sup>th</sup> Annual Meeting of Taiwan Cooperative Oncology Group



- 2009-03-10 --- Mass spectrometry (MS)-based proteomic approaches for cancer biomarker discovery. 2009-03-10, Department of Bioscience Technology, Chung Yuan Christian University, Tao-Yuan, Taiwan.
- 2009-04-24 --- Mass spectrometry (MS)-based proteomic approaches for cancer biomarker discovery. 2009-04-24, Graduate Institute of Biomedical Sciences, Chang Gung University, Tao-Yuan, Taiwan.
- 2009-06-20 --- Enhanced interferon signaling pathway in oral cancer revealed by quantitative proteome analysis of microdissected specimens using  $^{16}\text{O}/^{18}\text{O}$  labeling and integrated 2DLC-ESI-MALDI tandem MS. 2009 TPS International Proteomics Conference and 5th AOHUPO MPI Workshop, June 19-20, Taipei, Taiwan.
- 2009-08-15 --- Mass spectrometry (MS)-based proteomic approaches for cancer biomarker discovery : Opportunities and challenges. Symposium on Frontiers of Biomedical Sciences. August 15, 2009, Tao-Yuan, Taiwan.
- 2010-04-23 --- Discovery and Multiplexed Quantification of Body Fluid Accessible Biomarkers for Cancer. 2010 Disease Biomarker and TPS International Conference. April 23-24, 2010, Tao-Yuan, Taiwan.
- 2010-11-05 --- Discovery and multiplexed quantification of body fluid- accessible biomarkers for cancer. Institute of Molecular Biology, National Chung Hsing University, November 5, 2010, Taichung, Taiwan.
- 2010-12-06 --- Discovery and multiplexed quantification of body-fluid accessible biomarkers for cancer. The 4th Cao Tian Qin Memorial Symposium. December 6, 2010, Xiamen, China.
- 2011-02-22 --- Mass spectrometry-based profiling of cancer cell secretome, a reservoir for discovery of novel cancer biomarkers and signaling pathways. Xiamen Winter Symposium. February 21-23, 2011, Xiamen, China.
- 2011-08-29 --- Technology Platforms for Cancer Biosignatures Study. Biomarkers and Translational Medicine Workshop. August 29-30, 2011, Chang Gung University, Tao-Yuan, Taiwan.
- 2012-03-30 --- Integrated omics approaches for discovery of body fluid-accessible biomarkers for cancer. KHUPO 12<sup>TH</sup> ANNUAL INTERNATIONAL PROTEOMICS CONFERENCE, March 29 -30, 2012, Cultural Center, Seoul National University, Seoul, Korea
- 2012-05-07 --- Multiplexed quantification of 63 proteins in human urine by multiple reaction monitoring-based mass spectrometry for discovery of potential bladder cancer biomarkers. AOHUPO 6<sup>th</sup> Congress, May- 5-7, Beijing, China
- 2012-08-13 --- Discovery and Verification of Body Fluid-Accessible Cancer Biomarkers by Targeted Mass Spectrometry. 2012 Biomedical Research Symposium of National Health Research Institutes, August 13, 2012, Miaoli County, Taiwan
- 2012-09-25 --- Introduction of SISCAPA (stable isotope standards and capture by anti-peptide antibodies) platform for biomarker verification. Workshop for Biomarker Validation using MRM-MS. Taoyuan, Taiwan. Sep. 25, 2012
- 2012-11-06-國立中正大學化生系演講 Multiplexed quantification of candidate cancer biomarkers in body fluids by targeted mass spectrometry. Department of Chemistry and Biochemistry, National Chung Cheng University, Chiayi, Taiwan.
- 2012-11-15-國立中央大學系統生物與生物資訊研究所 Targeted mass spectrometry for multiplexed quantification of candidate cancer biomarkers in body fluids. Institute of Systems Biology and Bioinformatics, National Central University, Chongli, Taiwan.
- 2012-11-22-國立陽明大學醫學生物技術暨檢驗學系 Discovery and verification of multiple candidate cancer biomarkers in body fluids by targeted mass spectrometry. Department of Biotechnology and Laboratory Science in Medicine, National Yang-Ming University, Taipei, Taiwan.
- 2012-12-17-台灣塞爾克斯中華民國 101 年質譜用戶研討會 Targeted mass spectrometry for multiplexed quantification of candidate cancer biomarkers in body fluids. 2012 AB SCIEX user meeting, Taipei
- 2013-09-17- Identification of dysregulated kinase-mediated pathways in hepatocellular carcinoma by a quantitative phosphoproteome approach. HUPO 12th Annual World Congress - September 14 -18,

- 2013, Yokohama, Japan.
- 2013-11-1-質譜分析技術在臨床醫學檢測之學術研討會 Targeted mass spectrometry for multiplexed quantification/verification of candidate oral cancer biomarkers in saliva. Mass Spectrometry for Clinical Diagnosis and Related Research Symposium, National Sun Yat-sen University, Kaohsiung, Taiwan.
- 2013-12-13-「蛋白體學在轉譯醫學與農學上之應用研習會」-建構免疫吸附增幅-多重反應監視質譜術以定量多重生物標誌. 2013 台灣蛋白體學會冬季研習會 暨 東區三校轉譯醫學研討會, 國立宜蘭大學
- 2014-03-15-第二十九屆生物醫學聯合學術年會 Discovery and Verification of Body Fluid-Accessible Cancer Biomarkers by the Targeted Proteomics Approach. 生物化學及分子生物學學會, 國防醫學院
- 2014-4-7-台灣師範大學化學系 The emerging role of targeted mass spectrometry in cancer biomarker development pipeline
- 2014-09-13-台南奇美醫學中心學術研討會 Discovery and Verification of Body Fluid-Accessible Cancer Biomarkers by the Targeted Proteomics Approach
- 2015-10-27-第14屆兩岸生物醫學討論會—蛋白質科學的研究 Targeted mass spectrometry approaches for protein biomarker verification, 中科院上海生科院生化與細胞生物所與蛋白質科學中心
- 2016-09-19-Invited lecture, Verification of oral cancer biomarkers and their translation to clinical settings. HUPO 15<sup>th</sup> Annual World Congress, Sep 18-21, 2016, Taipei, Taiwan.
- 2017-9-6- Invited lecture, Verification of oral cancer biomarkers and their translation to clinical settings. The 26<sup>th</sup> Korea Genome Organization Annual Conference 2017, 2017/9/6, Seoul, Korea.
- 2017-11-25-Invited Plenary Talk, Targeted proteomics approach for quantifying V600EBRAF oncoprotein in colorectal carcinoma. 2017 TPS 年會, Academic Sinica, Taipei, Taiwan.
- 2018-05-18- Invited lecture, Development of salivary biomarkers for oral cancer. Mass Spec and Proteomics 2018 (MSP2018), a joint conference of Asia-Oceania HUPO, Japanese Proteomics Society and Mass Spec Society of Japan, May 16-18, 2018. Osaka, Japan.
- 2018-05-19- Invited lecture, Current status of cancer proteogenomics in Chang Gung University. International proteogenome workshop in Kyoto, Japan, May 19, 2018.
- 2018-07-08- Invited lecture, Salivary protein biomarkers for oral cancer detection. 第十五屆台灣質譜學會年會暨第七屆世界華人質譜研討會, Academic Sinica, Taipei, Taiwan.
- 2019-01-19- Invited lecture, Exploring plasma-derived, exosomal membrane-associated proteins as novel cancer biomarkers. 2019 APEV @ TAIPEI Asia-Pacific Extracellular Vesicles Conference, National Taiwan University. Taipei, Taiwan.
- 2019-04-19- Invited lecture, Exploring saliva metabolite biomarkers for oral cancer by chemical isotope labeling LC-MS approach. Taiwan Society for Mass Spectrometry 2019 Spring Symposium (台灣質譜學會 2019 春季專題研討會), National Cheng Kung University, Tainan, Taiwan.
- 2019-09-05- Invited lecture, Salivary diagnostics for oral cancer: from Biosignatures study to point-of-care testing. Short Courses in Frontier Science and Technology Series-Data analysis is quantitative proteomics. Yilan, Taiwan.

## Book Chapters

1. Wen-Chuan Huang, Yann-Lii Leu, **Jau-Song Yu**. (2011). Cancer and treatment with seeds of Chinese Fan Palm (*Livistona chinensis* R. Brown). In V. R. Preedy, R. R. Watson, V. B. Patel (Editors), *Nuts & Seeds in Health and Disease Prevention* (1st ed.) (pp 325-331). London, Burlington, San Diego: Academic Press is an imprint of Elsevier.
2. Yi-Ting Chen, Carol E. Parker, Hsiao-Wei Chen, Chien-Lun Chen, Dominik Domanski, Derek S. Smith, Chih-Ching Wu, Ting Chung, Kung-Hao Liang, Min-Chi Chen, Yu-Sun Chang, Christoph H. Borchers, and **Jau-Song Yu**. (2013) Chapter 10 "A Pipeline that Integrates the Discovery and Verification Studies of Urinary Protein Biomarkers Reveals Candidate Markers for Bladder Cancer".

In Comprehensive Biomarker Discovery and Validation for Clinical Application. Peter Horvatovich, Rainer Bischoff, David E. Thurston (Editors), Royal Society of Chemistry (RSC).

## Patents

1. **Yu JS**, Chang KP. (2012) Method of detecting malignancy of nasopharyngeal carcinoma and a nasopharyngeal carcinoma malignancy biomarker. United States Patent, US8,148,059B2, Apr. 3, 2012. Patent period 2012/4/3~2029/10/30
2. 陳怡婷、**余兆松**、陳建綸、張玉生 (2013) 膀胱癌之生物標記及其檢測方法。中華民國專利發明第I390204號, 專利權期間: 2013/03/21-2030/2/10
3. **余兆松**、張雅婷、吳治慶、石宜銘、張玉生 (2013) 胰臟癌之血清生物檢測標誌及其應用(A serological marker for detecting pancreatic cancer and a method for using the serological marker)。中華民國專利發明第I408370號, 專利權期間: 2013/9/11~2031/5/18
4. **余兆松**、蔡名鴻、謝玲玲 (2014) 大腸直腸癌遠端轉移之血漿生物標誌及其應用(Plasma Marker for Distal Metastasis in Colorectal Cancer)。中華民國專利發明第I444386號, 專利權期間: 2014/7/11~2032/4/9
5. Chao-Sung Lai, **Jau-Song Yu**, Yu-Sun Chang, Po-Lung Yang, Tseng-Fu Lu, Yi-Ting Lin, Wen-Yu Chuang, Ting-Chun Yu, I-Shun Wang, Jyh-Ping Chen, Chou Chien (2014) Surface treatment method by using the NH<sub>3</sub> plasma treatment to modify the sensing thin-film. United States Patent, US8741679 B2, June 3, 2014. Patent period 2014/6/3~2032/5/8
6. **Jau-Song Yu**, Ya-Ting Chang, Chih-Ching Wu, Yi-Ming Shyr, Yu-Sun Chang (2014) A method for detecting pancreatic cancer using the serological marker ULBP2. European patent, EP2525227B1, Patent period: 2/16/2015~5/16/2032 (Poland), 11/19/2014~5/16/2032 (France), 12/11/2014~5/16/2032 (Germany), 1/20/2015~5/16/2032 (Italy), 11/19/2014~5/16/2032 (United Kingdom), 1/13/2015~5/16/2032 (Spain)
7. 陳怡婷、**余兆松**、陳建綸、張玉生 (2016) 尿液生物標記作為預測膀胱及腎臟癌的用途。中華民國專利發明第I522367號, 專利權期間: 2016/2/21~2033/4/11
8. **Jau-Song Yu**, Wei-Fan Chiang, Yi-Ting Chen, Yu-Sun Chang, Lai-Chu See, Yung Chin Hsiao, Kai-Ping Chang. (2016) Apparatus and methods for detecting oral squamous cell carcinoma. US provisional application. No. 62309766 (application date: 2016/03/17)
9. Yu-Sun Chang, **Jau-Song Yu**, Yi-Ting Chen, Wei-Fan Chiang, Yung Chin Hsiao, Lai-Chu See, Kai-Ping Chang. (2017) Methods for cancer diagnosis and prognosis. International application (PCT) No. PCT/US17/22853 (application date: 2017/03/17)
10. **余兆松**、蔣維凡、陳怡婷、蕭永晉、張玉生、史麗珠、張凱評 (2019) 一種用以診斷及預斷癌症的方法。中華民國專利發明第I651536號, 專利權期間: 2019/2/21~2037/3/15 (申請案號: 106108654, 申請日2017/03/17)
11. Err-Cheng Chan, Kuei-Tien Chen, **Jau-Song Yu**, Yu-Sun Chang Jinn-Shiun Chen. (2017) Serological markers for detecting colorectal cancer and their application for inhibiting colorectal cancer cells. United States Patent, US 9,835,636 B2, Dec. 5, 2017. Patent period: 2011/10/4-2031/10/3

## Technology transfer and industry-university collaboration

1. The technology entitled “Method for cancer diagnosis and prognosis” 「口腔癌檢測方法的相關技術」 has been transferred to See & Treatment LTD. (世延生醫股份有限公司), time period: 2017/1/23-2023/1/22, royalty free: 10,000,000 NTD. Industry-university collaboration project entitled “Development of immunoassay kits for detecting oral cancer biomarkers”, time period: 2017/6/1-2019/5/31, program budget: 6,300,000 NTD.
2. The technology entitled “Serum biomarker for pancreatic cancer and its application” 「胰臟癌之血清

生物檢測標誌及其應用」has been transferred to See & Treatment LTD. (世延生醫股份有限公司), time period: 2020/01/10~2030/01/10, royalty free: 15,000,000 NTD.