

Bibliography CR Jimenez (>100 papers in PubMed)

Emmink BL, Laoukili J, Kipp AP, Koster J, Govaert KM, Fatrai S, Verheem A, Steller EJ, Brigelius-Flohe R, Jimenez CR, Borel Rinkes IH, Kranenburg O. GPx2 suppression of H₂O₂ stress links the formation of differentiated tumor mass to metastatic capacity in colorectal cancer. *Cancer Res.* 2014 Sep 26. pii: canres.1645.2014. [Epub ahead of print]

1: Labots M, Schütte LM, van der Mijl JC, Pham TV, Jiménez CR, Verheul HM. Mass Spectrometry-Based Serum and Plasma Peptidome Profiling for Prediction of Treatment Outcome in Patients With Solid Malignancies. *Oncologist.* 2014 Sep 3. pii: theoncologist.2014-0101. [Epub ahead of print] Review. PubMed PMID: 25187478.

2: Rajcevic U, Knol JC, Piersma S, Bougnaud S, Fack F, Sundlisaeter E, Søndena K, Myklebust R, Pham TV, Niclou SP, Jiménez CR. Colorectal cancer derived organotypic spheroids maintain essential tissue characteristics but adapt their metabolism in culture. *Proteome Sci.* 2014 Jul 11;12:39. doi: 10.1186/1477-5956-12-39. eCollection 2014. PubMed PMID: 25075203; PubMed Central PMCID: PMC4114130.

3: Hassan C, Kester MG, Oudgenoeg G, de Ru AH, Janssen GM, Drijfhout JW, Spaapen RM, Jiménez CR, Heemskerk MH, Falkenburg JH, van Veelen PA. Accurate quantitation of MHC-bound peptides by application of isotopically labeled peptide MHC complexes. *J Proteomics.* 2014 Jul 19;109C:240-244. doi: 10.1016/j.jprot.2014.07.009. [Epub ahead of print] PubMed PMID: 25050860.

4: Daleke-Schermerhorn MH, Felix T, Soprova Z, Ten Hagen-Jongman CM, Vikström D, Majlessi L, Beskers J, Follmann F, de Punder K, van der Wel NN, Baumgarten T, Pham TV, Piersma SR, Jiménez CR, van Ulsen P, de Gier JW, Leclerc C, Jong WS, Luirink J. Decoration of outer membrane vesicles with multiple antigens by using an autotransporter approach. *Appl Environ Microbiol.* 2014 Sep 15;80(18):5854-65. doi: 10.1128/AEM.01941-14. Epub 2014 Jul 18. PubMed PMID: 25038093.

5: Senol O, Schaaij-Visser TB, Erkan EP, Dorfer C, Lewandrowski G, Pham TV, Piersma SR, Peerdeman SM, Ströbel T, Tannous B, Saydam N, Slavc I, Knosp E, Jimenez CR, Saydam O. miR-200a-mediated suppression of non-muscle heavy chain IIb inhibits meningioma cell migration and tumor growth in vivo. *Oncogene.* 2014 May 26;0. doi: 10.1038/onc.2014.120. [Epub ahead of print] PubMed PMID: 24858044.

6: Jimenez CR, Verheul HM. Mass spectrometry-based proteomics: from cancer biology to protein biomarkers, drug targets, and clinical applications. *Am Soc Clin Oncol Educ Book.* 2014:e504-10. doi: 10.14694/EdBook_AM.2014.34.e504. PubMed PMID: 24857147.

7: Chiasserini D, van Weering JR, Piersma SR, Pham TV, Malekzadeh A, Teunissen CE, de Wit H, Jiménez CR. Proteomic analysis of cerebrospinal fluid extracellular vesicles: a comprehensive dataset. *J Proteomics.* 2014 Jun 25;106:191-204. doi: 10.1016/j.jprot.2014.04.028. Epub 2014 Apr 24. PubMed PMID: 24769233.

8: Del Campo M, Hoozemans JJ, Dekkers LL, Rozemuller AJ, Korth C, Müller-Schiffmann A, Scheltens P, Blankenstein MA, Jimenez CR, Veerhuis R, Teunissen CE. BRI2-BRICHOS is increased in human amyloid plaques in early stages of Alzheimer's disease. *Neurobiol Aging.* 2014 Jul;35(7):1596-604. doi:

10.1016/j.neurobiolaging.2014.01.007. Epub 2014 Jan 13. PubMed PMID: 24524963.

9: de Wit M, Kant H, Piersma SR, Pham TV, Mongera S, van Berkel MP, Boven E, Pontén F, Meijer GA, Jimenez CR, Fijneman RJ. Colorectal cancer candidate biomarkers identified by tissue secretome proteome profiling. *J Proteomics*. 2014 Mar 17;99:26-39. doi: 10.1016/j.jprot.2014.01.001. Epub 2014 Jan 10. PubMed PMID: 24418523.

10: Bijnsdorp IV, Geldof AA, Lavaei M, Piersma SR, van Moorselaar RJ, Jimenez CR. Exosomal ITGA3 interferes with non-cancerous prostate cell functions and is increased in urine exosomes of metastatic prostate cancer patients. *J Extracell Vesicles*. 2013 Dec 23;2. doi: 10.3402/jev.v2i0.22097. eCollection 2013. PubMed PMID: 24371517; PubMed Central PMCID: PMC3873120.

11: Knol JC, de Wit M, Albrethsen J, Piersma SR, Pham TV, Mongera S, Carvalho B, Fijneman RJ, Meijer GA, Jiménez CR. Proteomics of differential extraction fractions enriched for chromatin-binding proteins from colon adenoma and carcinoma tissues. *Biochim Biophys Acta*. 2014 May;1844(5):1034-43. doi: 10.1016/j.bbapap.2013.12.006. Epub 2013 Dec 17. PubMed PMID: 24361553.

12: van der Woude AD, Stoop EJ, Stuess M, Wang S, Ummels R, van Stempvoort G, Piersma SR, Cascioferro A, Jiménez CR, Houben EN, Luirink J, Pieters J, van der Sar AM, Bitter W. Analysis of SecA2-dependent substrates in *Mycobacterium marinum* identifies protein kinase G (PknG) as a virulence effector. *Cell Microbiol*. 2014 Feb;16(2):280-95. doi: 10.1111/cmi.12221. Epub 2013 Nov 6. PubMed PMID: 24119166.

13: Kooij V, Zhang P, Piersma SR, Sequeira V, Boontje NM, Wijnker PJ, Jiménez CR, Jaquet KE, dos Remedios C, Murphy AM, Van Eyk JE, van der Velden J, Stienen GJ. PKC α -specific phosphorylation of the troponin complex in human myocardium: a functional and proteomics analysis. *PLoS One*. 2013 Oct 7;8(10):e74847. doi: 10.1371/journal.pone.0074847. eCollection 2013. PubMed PMID: 24116014; PubMed Central PMCID: PMC3792062.

14: Posthumadeboer J, Piersma SR, Pham TV, van Egmond PW, Knol JC, Cleton-Jansen AM, van Geer MA, van Beusechem VW, Kaspers GJ, van Royen BJ, Jiménez CR, Helder MN. Surface proteomic analysis of osteosarcoma identifies EPHA2 as receptor for targeted drug delivery. *Br J Cancer*. 2013 Oct 15;109(8):2142-54. doi: 10.1038/bjc.2013.578. Epub 2013 Sep 24. PubMed PMID: 24064975; PubMed Central PMCID: PMC3798973.

15: Snoeren N, Emmink BL, Koerkamp MJ, van Hooff SR, Goos JA, van Houdt WJ, de Wit M, Prins AM, Piersma SR, Pham TV, Belt EJ, Bril H, Stockmann HB, Meijer GA, van Hillegersberg R, Holstege FC, Jimenez CR, Fijneman RJ, Kranenburg OW, Rinkes IH. Maspin is a marker for early recurrence in primary stage III and IV colorectal cancer. *Br J Cancer*. 2013 Sep 17;109(6):1636-47. doi: 10.1038/bjc.2013.489. Epub 2013 Sep 3. PubMed PMID: 24002600; PubMed Central PMCID: PMC3776998.

16: Lam SW, Jimenez CR, Boven E. Breast cancer classification by proteomic technologies: current state of knowledge. *Cancer Treat Rev*. 2014 Feb;40(1):129-38. doi: 10.1016/j.ctrv.2013.06.006. Epub 2013 Jul 23. Review. PubMed PMID: 23891266.

17: Petersen K, Rajcevic U, Abdul Rahim SA, Jonassen I, Kalland KH, Jimenez CR, Bjerkgvig R, Niclou SP. Gene set based integrated data analysis reveals phenotypic differences in a brain cancer model. *PLoS One*. 2013 Jul 9;8(7):e68288. doi: 10.1371/journal.pone.0068288. Print 2013. PubMed PMID: 23874576; PubMed Central PMCID: PMC3706599.

18: Emmink BL, Verheem A, Van Houdt WJ, Steller EJ, Govaert KM, Pham TV, Piersma SR, Borel Rinkes IH, Jimenez CR, Kranenburg O. The secretome of colon cancer stem cells contains drug-metabolizing enzymes. *J Proteomics*. 2013 Oct 8;91:84-96. doi: 10.1016/j.jprot.2013.06.027. Epub 2013 Jul 5. PubMed PMID: 23835434.

19: De Vries-van Leeuwen IJ, da Costa Pereira D, Flach KD, Piersma SR, Haase C, Bier D, Yalcin Z, Michalides R, Feenstra KA, Jiménez CR, de Greef TF, Brunsveld L, Ottmann C, Zwart W, de Boer AH. Interaction of 14-3-3 proteins with the estrogen receptor alpha F domain provides a drug target interface. *Proc Natl Acad Sci U S A*. 2013 May 28;110(22):8894-9. doi: 10.1073/pnas.1220809110. Epub 2013 May 15. PubMed PMID: 23676274; PubMed Central PMCID: PMC3670367.

20: Piersma SR, Warmoes MO, de Wit M, de Reus I, Knol JC, Jiménez CR. Whole gel processing procedure for GeLC-MS/MS based proteomics. *Proteome Sci*. 2013 Apr 23;11(1):17. doi: 10.1186/1477-5956-11-17. PubMed PMID: 23617947; PubMed Central PMCID: PMC3656797.

21: van der Woude AD, Mahendran KR, Ummels R, Piersma SR, Pham TV, Jiménez CR, de Punder K, van der Wel NN, Winterhalter M, Luirink J, Bitter W, Houben EN. Differential detergent extraction of mycobacterium marinum cell envelope proteins identifies an extensively modified threonine-rich outer membrane protein with channel activity. *J Bacteriol*. 2013 May;195(9):2050-9. doi: 10.1128/JB.02236-12. Epub 2013 Mar 1. PubMed PMID: 23457249; PubMed Central PMCID: PMC3624596.

22: Warmoes M, Jaspers JE, Xu G, Sampadi BK, Pham TV, Knol JC, Piersma SR, Boven E, Jonkers J, Rottenberg S, Jimenez CR. Proteomics of genetically engineered mouse mammary tumors identifies fatty acid metabolism members as potential predictive markers for cisplatin resistance. *Mol Cell Proteomics*. 2013 May;12(5):1319-34. doi: 10.1074/mcp.M112.024182. Epub 2013 Feb 8. PubMed PMID: 23397111; PubMed Central PMCID: PMC3650342.

23: Schaaij-Visser TB, de Wit M, Lam SW, Jiménez CR. The cancer secretome, current status and opportunities in the lung, breast and colorectal cancer context. *Biochim Biophys Acta*. 2013 Nov;1834(11):2242-58. doi: 10.1016/j.bbapap.2013.01.029. Epub 2013 Jan 31. Review. PubMed PMID: 23376433.

24: Albrethsen J, Agner J, Piersma SR, Højrup P, Pham TV, Weldingh K, Jimenez CR, Andersen P, Rosenkrands I. Proteomic profiling of Mycobacterium tuberculosis identifies nutrient-starvation-responsive toxin-antitoxin systems. *Mol Cell Proteomics*. 2013 May;12(5):1180-91. doi: 10.1074/mcp.M112.018846. Epub 2013 Jan 23. PubMed PMID: 23345537; PubMed Central PMCID: PMC3650330.

25: Bögels M, Braster R, Nijland PG, Gül N, van de Luijngaarden W, Fijneman RJ, Meijer GA, Jimenez CR, Beelen RH, van Egmond M. Carcinoma origin dictates

differential skewing of monocyte function. *Oncoimmunology*. 2012 Sep 1;1(6):798-809. PubMed PMID: 23162747; PubMed Central PMCID: PMC3489735.

26: de Wit M, Fijneman RJ, Verheul HM, Meijer GA, Jimenez CR. Proteomics in colorectal cancer translational research: biomarker discovery for clinical applications. *Clin Biochem*. 2013 Apr;46(6):466-79. doi: 10.1016/j.clinbiochem.2012.10.039. Epub 2012 Nov 13. Review. PubMed PMID: 23159294.

27: Pham TV, Jimenez CR. An accurate paired sample test for count data. *Bioinformatics*. 2012 Sep 15;28(18):i596-i602. doi: 10.1093/bioinformatics/bts394. PubMed PMID: 22962487; PubMed Central PMCID: PMC3436821.

28: Houben EN, Bestebroer J, Ummels R, Wilson L, Piersma SR, Jiménez CR, Ottenhoff TH, Luirink J, Bitter W. Composition of the type VII secretion system membrane complex. *Mol Microbiol*. 2012 Oct;86(2):472-84. doi: 10.1111/j.1365-2958.2012.08206.x. Epub 2012 Aug 27. PubMed PMID: 22925462.

29: Daleke MH, van der Woude AD, Parret AH, Ummels R, de Groot AM, Watson D, Piersma SR, Jiménez CR, Luirink J, Bitter W, Houben EN. Specific chaperones for the type VII protein secretion pathway. *J Biol Chem*. 2012 Sep 14;287(38):31939-47. doi: 10.1074/jbc.M112.397596. Epub 2012 Jul 29. PubMed PMID: 22843727; PubMed Central PMCID: PMC3442526.

30: Kranenburg O, Emmink BL, Knol J, van Houdt WJ, Rinkes IH, Jimenez CR. Proteomics in studying cancer stem cell biology. *Expert Rev Proteomics*. 2012 Jun;9(3):325-36. doi: 10.1586/ep.12.24. Review. PubMed PMID: 22809210.

31: Pham TV, Piersma SR, Oudgenoeg G, Jimenez CR. Label-free mass spectrometry-based proteomics for biomarker discovery and validation. *Expert Rev Mol Diagn*. 2012 May;12(4):343-59. doi: 10.1586/erm.12.31. Review. PubMed PMID: 22616700.

32: Warmoes M, Jaspers JE, Pham TV, Piersma SR, Oudgenoeg G, Massink MP, Waisfisz Q, Rottenberg S, Boven E, Jonkers J, Jimenez CR. Proteomics of mouse BRCA1-deficient mammary tumors identifies DNA repair proteins with potential diagnostic and prognostic value in human breast cancer. *Mol Cell Proteomics*. 2012 Jul;11(7):M111.013334. doi: 10.1074/mcp.M111.013334. Epub 2012 Feb 24. PubMed PMID: 22366898; PubMed Central PMCID: PMC3394939.

33: Fijneman RJ, de Wit M, Pourghasian M, Piersma SR, Pham TV, Warmoes MO, Lavai M, Piso C, Smit F, Delis-van Diemen PM, van Turenhout ST, Terhaar sive Droste JS, Mulder CJ, Blankenstein MA, Robanus-Maandag EC, Smits R, Fodde R, van Hinsbergh VW, Meijer GA, Jimenez CR. Proximal fluid proteome profiling of mouse colon tumors reveals biomarkers for early diagnosis of human colorectal cancer. *Clin Cancer Res*. 2012 May 1;18(9):2613-24. doi: 10.1158/1078-0432.CCR-11-1937. Epub 2012 Feb 20. PubMed PMID: 22351690.

34: Teunissen CE, Tumani H, Bennett JL, Berven FS, Brundin L, Comabella M, Franciotta D, Federiksen JL, Fleming JO, Furlan R, Hintzen RQ, Hughes SG, Jimenez CR, Johnson MH, Killestein J, Krasulova E, Kuhle J, Magnone MC, Petzold A, Rajda

C, Rejdak K, Schmidt HK, van Pesch V, Waubant E, Wolf C, Deisenhammer F, Giovannoni G, Hemmer B. Consensus Guidelines for CSF and Blood Biobanking for CNS Biomarker Studies. *Mult Scler Int.* 2011;2011:2464-12. doi: 10.1155/2011/246412. Epub 2011 Jul 18. PubMed PMID: 22096631; PubMed Central PMCID: PMC3195993.

35: van Dijk KD, Berendse HW, Drukarch B, Fratantoni SA, Pham TV, Piersma SR, Huisman E, Brevé JJ, Groenewegen HJ, Jimenez CR, van de Berg WD. The proteome of the locus ceruleus in Parkinson's disease: relevance to pathogenesis. *Brain Pathol.* 2012 Jul;22(4):485-98. doi: 10.1111/j.1750-3639.2011.00540.x. Epub 2011 Nov 8. PubMed PMID: 21988495.

36: Knol JC, Jimenez CR. MALDI-TOF serum profiling using semiautomated serum peptide capture with magnetic reversed phase (C18) beads. *Methods Mol Biol.* 2011;790:3-16. doi: 10.1007/978-1-61779-319-6_1. PubMed PMID: 21948402.

37: Gast MC, Zapatka M, van Tinteren H, Bontenbal M, Span PN, Tjan-Heijnen VC, Knol JC, Jimenez CR, Schellens JH, Beijnen JH. Postoperative serum proteomic profiles may predict recurrence-free survival in high-risk primary breast cancer. *J Cancer Res Clin Oncol.* 2011 Dec;137(12):1773-83. doi: 10.1007/s00432-011-1055-4. Epub 2011 Sep 13. PubMed PMID: 21913038; PubMed Central PMCID: PMC3205273.

38: de Wit M, Jimenez CR, Carvalho B, Belien JA, Delis-van Diemen PM, Mongera S, Piersma SR, Vikas M, Navani S, Pontén F, Meijer GA, Fijneman RJ. Cell surface proteomics identifies glucose transporter type 1 and prion protein as candidate biomarkers for colorectal adenoma-to-carcinoma progression. *Gut.* 2012 Jun;61(6):855-64. doi: 10.1136/gutjnl-2011-300511. Epub 2011 Sep 2. PubMed PMID: 21890811.

39: Van Houdt WJ, Emmink BL, Pham TV, Piersma SR, Verheem A, Vries RG, Fratantoni SA, Pronk A, Clevers H, Borel Rinkes IH, Jimenez CR, Kranenburg O. Comparative proteomics of colon cancer stem cells and differentiated tumor cells identifies BIRC6 as a potential therapeutic target. *Mol Cell Proteomics.* 2011 Dec;10(12):M111.011353. doi: 10.1074/mcp.M111.011353. Epub 2011 Jul 25. PubMed PMID: 21788403; PubMed Central PMCID: PMC3237084.

40: Skvortsov S, Jimenez CR, Knol JC, Eichberger P, Schiestl B, Debbage P, Skvortsova I, Lukas P. Radioresistant head and neck squamous cell carcinoma cells: intracellular signaling, putative biomarkers for tumor recurrences and possible therapeutic targets. *Radiother Oncol.* 2011 Oct;101(1):177-82. doi: 10.1016/j.radonc.2011.05.067. Epub 2011 Jun 21. PubMed PMID: 21700351.

41: Bosch LJ, Carvalho B, Fijneman RJ, Jimenez CR, Pinedo HM, van Engeland M, Meijer GA. Molecular tests for colorectal cancer screening. *Clin Colorectal Cancer.* 2011 Mar 1;10(1):8-23. doi: 10.3816/CCC.2011.n.002. Review. PubMed PMID: 21609931.

42: Teunissen CE, Koel-Simmelink MJ, Pham TV, Knol JC, Khalil M, Trentini A, Killestein J, Nielsen J, Vrenken H, Popescu V, Dijkstra CD, Jimenez CR. Identification of biomarkers for diagnosis and progression of MS by MALDI-TOF mass spectrometry. *Mult Scler.* 2011 Jul;17(7):838-50. doi: 10.1177/1352458511399614. Epub 2011 Apr 19. PubMed PMID: 21505015.

43: Emmink BL, Van Houdt WJ, Vries RG, Hoogwater FJ, Govaert KM, Verheem A, Nijkamp MW, Steller EJ, Jimenez CR, Clevers H, Borel Rinkes IH, Kranenburg O. Differentiated human colorectal cancer cells protect tumor-initiating cells from irinotecan. *Gastroenterology*. 2011 Jul;141(1):269-78. doi: 10.1053/j.gastro.2011.03.052. Epub 2011 Apr 1. PubMed PMID: 21459094.

44: Fratantoni SA, Piersma SR, Jimenez CR. Comparison of the performance of two affinity depletion spin filters for quantitative proteomics of CSF: Evaluation of sensitivity and reproducibility of CSF analysis using GeLC-MS/MS and spectral counting. *Proteomics Clin Appl*. 2010 Jul;4(6-7):613-7. doi: 10.1002/prca.200900179. Epub 2010 Mar 29. PubMed PMID: 21137079.

45: Jiménez CR, Slijper M. Current status of cancer proteomics, how far are we from clinical applications? *J Proteomics*. 2010 Sep 10;73(10):1787-9. doi: 10.1016/j.jprot.2010.08.001. Epub 2010 Aug 6. PubMed PMID: 20692387.

46: Jimenez CR, Knol JC, Meijer GA, Fijneman RJ. Proteomics of colorectal cancer: overview of discovery studies and identification of commonly identified cancer-associated proteins and candidate CRC serum markers. *J Proteomics*. 2010 Sep 10;73(10):1873-95. doi: 10.1016/j.jprot.2010.06.004. Epub 2010 Jun 23. Review. PubMed PMID: 20601272.

47: Piersma SR, Labots M, Verheul HM, Jiménez CR. Strategies for kinome profiling in cancer and potential clinical applications: chemical proteomics and array-based methods. *Anal Bioanal Chem*. 2010 Aug;397(8):3163-71. doi: 10.1007/s00216-010-3784-7. Epub 2010 Jun 8. Review. PubMed PMID: 20526883.

48: van Dijk KD, Teunissen CE, Drukarch B, Jimenez CR, Groenewegen HJ, Berendse HW, van de Berg WD. Diagnostic cerebrospinal fluid biomarkers for Parkinson's disease: a pathogenetically based approach. *Neurobiol Dis*. 2010 Sep;39(3):229-41. doi: 10.1016/j.nbd.2010.04.020. Epub 2010 May 6. Review. PubMed PMID: 20451609.

49: Sani M, Houben EN, Geurtsen J, Pierson J, de Punder K, van Zon M, Wever B, Piersma SR, Jiménez CR, Daffé M, Appelmelk BJ, Bitter W, van der Wel N, Peters PJ. Direct visualization by cryo-EM of the mycobacterial capsular layer: a labile structure containing ESX-1-secreted proteins. *PLoS Pathog*. 2010 Mar 5;6(3):e1000794. doi: 10.1371/journal.ppat.1000794. PubMed PMID: 20221442; PubMed Central PMCID: PMC2832766.

50: Albrethsen J, Knol JC, Piersma SR, Pham TV, de Wit M, Mongera S, Carvalho B, Verheul HM, Fijneman RJ, Meijer GA, Jimenez CR. Subnuclear proteomics in colorectal cancer: identification of proteins enriched in the nuclear matrix fraction and regulation in adenoma to carcinoma progression. *Mol Cell Proteomics*. 2010 May;9(5):988-1005. doi: 10.1074/mcp.M900546-MCP200. Epub 2010 Jan 20. PubMed PMID: 20089989; PubMed Central PMCID: PMC2871429.

51: Piersma SR, Fiedler U, Span S, Lingnau A, Pham TV, Hoffmann S, Kubbutat MH, Jiménez CR. Workflow comparison for label-free, quantitative secretome proteomics for cancer biomarker discovery: method evaluation, differential analysis, and verification in serum. *J Proteome Res*. 2010 Apr 5;9(4):1913-22. doi:

10.1021/pr901072h. PubMed PMID: 20085282.

52: Pham TV, Piersma SR, Warmoes M, Jimenez CR. On the beta-binomial model for analysis of spectral count data in label-free tandem mass spectrometry-based proteomics. *Bioinformatics*. 2010 Feb 1;26(3):363-9. doi: 10.1093/bioinformatics/btp677. Epub 2009 Dec 9. PubMed PMID: 20007255.

53: Saydam O, Senol O, Schaaij-Visser TB, Pham TV, Piersma SR, Stemmer-Rachamimov AO, Wurdinger T, Peerdeman SM, Jimenez CR. Comparative protein profiling reveals minichromosome maintenance (MCM) proteins as novel potential tumor markers for meningiomas. *J Proteome Res*. 2010 Jan;9(1):485-94. doi: 10.1021/pr900834h. PubMed PMID: 19877719; PubMed Central PMCID: PMC2810358.

54: Gast MC, van Dulken EJ, van Loenen TK, Kingma-Vegter F, Westerga J, Flohil CC, Knol JC, Jimenez CR, van Gils CH, Wessels LF, Schellens JH, Beijnen JH. Detection of breast cancer by surface-enhanced laser desorption/ionization time-of-flight mass spectrometry tissue and serum protein profiling. *Int J Biol Markers*. 2009 Jul-Sep;24(3):130-41. PubMed PMID: 19787623.

55: van Dijk FS, Nesbitt IM, Zwikstra EH, Nikkels PG, Piersma SR, Fratantoni SA, Jimenez CR, Huizer M, Morsman AC, Cobben JM, van Roij MH, Elting MW, Verbeke JI, Wijnaendts LC, Shaw NJ, Högl W, McKeown C, Sistermans EA, Dalton A, Meijers-Heijboer H, Pals G. PPIB mutations cause severe osteogenesis imperfecta. *Am J Hum Genet*. 2009 Oct;85(4):521-7. doi: 10.1016/j.ajhg.2009.09.001. Epub 2009 Sep 24. PubMed PMID: 19781681; PubMed Central PMCID: PMC2756556.

56: Voortman J, Pham TV, Knol JC, Giaccone G, Jimenez CR. Prediction of outcome of non-small cell lung cancer patients treated with chemotherapy and bortezomib by time-course MALDI-TOF-MS serum peptide profiling. *Proteome Sci*. 2009 Sep 3;7:34. doi: 10.1186/1477-5956-7-34. PubMed PMID: 19728888; PubMed Central PMCID: PMC2746186.

57: Rajcevic U, Petersen K, Knol JC, Loos M, Bougnaud S, Klychnikov O, Li KW, Pham TV, Wang J, Miletic H, Peng Z, Bjerkgvig R, Jimenez CR, Niclou SP. iTRAQ-based proteomics profiling reveals increased metabolic activity and cellular cross-talk in angiogenic compared with invasive glioblastoma phenotype. *Mol Cell Proteomics*. 2009 Nov;8(11):2595-612. doi: 10.1074/mcp.M900124-MCP200. Epub 2009 Aug 12. PubMed PMID: 19674965; PubMed Central PMCID: PMC2773724.

58: Tefsen B, van Stijn CM, van den Broek M, Kalay H, Knol JC, Jimenez CR, van Die I. Chemoenzymatic synthesis of multivalent neoglycoconjugates carrying the helminth glycan antigen LDNF. *Carbohydr Res*. 2009 Aug 17;344(12):1501-7. doi: 10.1016/j.carres.2009.05.027. Epub 2009 Jun 6. PubMed PMID: 19541294.

59: Jiménez CR. Sorting and zooming: subcellular proteomics is booming! *J Proteomics*. 2009 Feb 15;72(1):1-3. PubMed PMID: 19322937.

60: Rajcevic U, Niclou SP, Jimenez CR. Proteomics strategies for target identification and biomarker discovery in cancer. *Front Biosci (Landmark Ed)*. 2009 Jan 1;14:3292-303. Review. PubMed PMID: 19273274.

- 61: Chечиńska A, Giaccone G, Rodriguez JA, Kruyt FA, Jimenez CR. Comparative proteomics analysis of caspase-9-protein complexes in untreated and cytochrome c/dATP stimulated lysates of NSCLC cells. *J Proteomics*. 2009 May 2;72(4):575-85. doi: 10.1016/j.jprot.2008.11.016. Epub 2008 Dec 7. PubMed PMID: 19118655.
- 62: Piersma SR, Broxterman HJ, Kapci M, de Haas RR, Hoekman K, Verheul HM, Jiménez CR. Proteomics of the TRAP-induced platelet releasate. *J Proteomics*. 2009 Feb 15;72(1):91-109. doi: 10.1016/j.jprot.2008.10.009. Epub 2008 Nov 8. PubMed PMID: 19049909.
- 63: Albrethsen J, Knol JC, Jimenez CR. Unravelling the nuclear matrix proteome. *J Proteomics*. 2009 Feb 15;72(1):71-81. doi: 10.1016/j.jprot.2008.09.005. Epub 2008 Oct 14. Review. PubMed PMID: 18957335.
- 64: Engwegen JY, Alberts M, Knol JC, Jimenez CR, Depla AC, Tuynman H, van Heukelem HA, Snel P, Smits ME, Cats A, Schellens JH, Beijnen JH. Influence of variations in sample handling on SELDI-TOF MS serum protein profiles for colorectal cancer. *Proteomics Clin Appl*. 2008 Jun;2(6):936-45. doi: 10.1002/prca.200780068. PubMed PMID: 21136891.
- 65: Li KW, Jimenez CR. Synapse proteomics: current status and quantitative applications. *Expert Rev Proteomics*. 2008 Apr;5(2):353-60. doi: 10.1586/14789450.5.2.353. Review. PubMed PMID: 18466062.
- 66: Jiménez CR, Huang L, Qiu Y, Burlingame AL. Enzymatic approaches for obtaining amino acid sequence: on-target ladder sequencing. *Curr Protoc Protein Sci*. 2001 May;Chapter 16:Unit 16.7. doi: 10.1002/0471140864.ps1607s15. PubMed PMID: 18429134.
- 67: Jiménez CR, Huang L, Qiu Y, Burlingame AL. Searching sequence databases over the internet: protein identification using MS-tag. *Curr Protoc Protein Sci*. 2001 May;Chapter 16:Unit 16.6. doi: 10.1002/0471140864.ps1606s14. PubMed PMID: 18429133.
- 68: Jiménez CR, Huang L, Qiu Y, Burlingame AL. Searching sequence databases over the internet: protein identification using MS-Fit. *Curr Protoc Protein Sci*. 2001 May;Chapter 16:Unit 16.5. doi: 10.1002/0471140864.ps1605s14. PubMed PMID: 18429132.
- 69: Jiménez CR, Huang L, Qiu Y, Burlingame AL. In-gel digestion of proteins for MALDI-MS fingerprint mapping. *Curr Protoc Protein Sci*. 2001 May;Chapter 16:Unit 16.4. doi: 10.1002/0471140864.ps1604s14. PubMed PMID: 18429131.
- 70: Jiménez CR, Huang L, Qiu Y, Burlingame AL. Sample preparation for MALDI mass analysis of peptides and proteins. *Curr Protoc Protein Sci*. 2001 May;Chapter 16:Unit 16.3. doi: 10.1002/0471140864.ps1603s14. PubMed PMID: 18429130.
- 71: Hamacher M, Stephan C, Hardt T, Eisenacher M, Henkel A, Wiltfang J, Jimenez CR, Park YM, Marcus K, Meyer HE. Applications in brain proteomics: 8(th) HUPO

Brain Proteome Project Workshop 7 October 2007, Seoul, Korea. *Proteomics*. 2008 May;8(9):1750-3. doi: 10.1002/pmic.200701120. PubMed PMID: 18384107.

72: Pham TV, van de Wiel MA, Jimenez CR. Support vector machine approach to separate control and breast cancer serum samples. *Stat Appl Genet Mol Biol*. 2008;7(2):Article11. doi: 10.2202/1544-6115.1355. Epub 2008 Feb 21. PubMed PMID: 18312216.

73: Jimenez CR, Piersma S, Pham TV. High-throughput and targeted in-depth mass spectrometry-based approaches for biofluid profiling and biomarker discovery. *Biomark Med*. 2007 Dec;1(4):541-65. doi: 10.2217/17520363.1.4.541. PubMed PMID: 20477373.

74: Jimenez CR, Koel-Simmelink M, Pham TV, van der Voort L, Teunissen CE. Endogeneous peptide profiling of cerebrospinal fluid by MALDI-TOF mass spectrometry: Optimization of magnetic bead-based peptide capture and analysis of preanalytical variables. *Proteomics Clin Appl*. 2007 Nov;1(11):1385-92. doi: 10.1002/prca.200700330. Epub 2007 Oct 16. PubMed PMID: 21136638.

75: Jimenez CR, El Filali Z, Knol JC, Hoekman K, Kruyt FA, Giaccone G, Smit AB, Li KW. Automated serum peptide profiling using novel magnetic C18 beads off-line coupled to MALDI-TOF-MS. *Proteomics Clin Appl*. 2007 Jun;1(6):598-604. doi: 10.1002/prca.200600483. Epub 2007 May 11. PubMed PMID: 21136711.

76: Codrea MC, Jiménez CR, Heringa J, Marchiori E. Tools for computational processing of LC-MS datasets: a user's perspective. *Comput Methods Programs Biomed*. 2007 Jun;86(3):281-90. Epub 2007 Apr 24. PubMed PMID: 17459516.

77: Eiras S, Narolska NA, van Loon RB, Boontje NM, Zaremba R, Jimenez CR, Visser FC, Stoker W, van der Velden J, Stienen GJ. Alterations in contractile protein composition and function in human atrial dilatation and atrial fibrillation. *J Mol Cell Cardiol*. 2006 Sep;41(3):467-77. Epub 2006 Aug 9. PubMed PMID: 16901501.

78: Llamas MA, Sparrius M, Kloet R, Jiménez CR, Vandenbroucke-Grauls C, Bitter W. The heterologous siderophores ferrioxamine B and ferrichrome activate signaling pathways in *Pseudomonas aeruginosa*. *J Bacteriol*. 2006 Mar;188(5):1882-91. PubMed PMID: 16484199; PubMed Central PMCID: PMC1426570.

79: Li KW, Jimenez CR, van der Schors RC, Hornshaw MP, Schoffemeer AN, Smit AB. Intermittent administration of morphine alters protein expression in rat nucleus accumbens. *Proteomics*. 2006 Mar;6(6):2003-8. PubMed PMID: 16447156.

80: Jiménez CR. Batch introduction techniques. *Methods Enzymol*. 2005;405:36-49. PubMed PMID: 16413309.

81: Jiménez CR, Spijker S, de Schipper S, Lodder JC, Janse CK, Geraerts WP, van Minnen J, Syed NI, Burlingame AL, Smit AB, Li K. Peptidomics of a single identified neuron reveals diversity of multiple neuropeptides with convergent actions on cellular excitability. *J Neurosci*. 2006 Jan 11;26(2):518-29. PubMed PMID: 16407549.

82: Van den Oever MC, Spijker S, Li KW, Jiménez CR, Koya E, Van der Schors RC, Gouwenberg Y, Binnekade R, De Vries TJ, Schoffelmeer AN, Smit AB. A proteomics approach to identify long-term molecular changes in rat medial prefrontal cortex resulting from sucrose self-administration. *J Proteome Res.* 2006 Jan;5(1):147-54. PubMed PMID: 16396505.

83: Jiménez CR, Li KW, Smit AB, Janse C. Auto-inhibitory control of peptidergic molluscan neurons and reproductive senescence. *Neurobiol Aging.* 2006 May;27(5):763-9. Epub 2005 Jun 13. PubMed PMID: 15951060.

84: Altelaar AF, van Minnen J, Jiménez CR, Heeren RM, Piersma SR. Direct molecular imaging of *Lymnaea stagnalis* nervous tissue at subcellular spatial resolution by mass spectrometry. *Anal Chem.* 2005 Feb 1;77(3):735-41. PubMed PMID: 15679338.

85: Jiménez CR, Stam FJ, Li KW, Gouwenberg Y, Hornshaw MP, De Winter F, Verhaagen J, Smit AB. Proteomics of the injured rat sciatic nerve reveals protein expression dynamics during regeneration. *Mol Cell Proteomics.* 2005 Feb;4(2):120-32. Epub 2004 Oct 25. PubMed PMID: 15509515.

86: Jiménez CR, ter Maat A, Pieneman A, Burlingame AL, Smit AB, Li KW. Spatio-temporal dynamics of the egg-laying-inducing peptides during an egg-laying cycle: a semiquantitative matrix-assisted laser desorption/ionization mass spectrometry approach. *J Neurochem.* 2004 May;89(4):865-75. PubMed PMID: 15140186.

87: Smit AB, van Kesteren RE, Spijker S, Van Minnen J, van Golen FA, Jiménez CR, Li KW. Peptidergic modulation of male sexual behavior in *Lymnaea stagnalis*: structural and functional characterization of -FVamide neuropeptides. *J Neurochem.* 2003 Dec;87(5):1245-54. PubMed PMID: 14622104.

88: Li KW, Hornshaw MP, Van Der Schors RC, Watson R, Tate S, Casetta B, Jimenez CR, Gouwenberg Y, Gundelfinger ED, Smalla KH, Smit AB. Proteomics analysis of rat brain postsynaptic density. Implications of the diverse protein functional groups for the integration of synaptic physiology. *J Biol Chem.* 2004 Jan 9;279(2):987-1002. Epub 2003 Oct 7. PubMed PMID: 14532281.

89: Jiménez CR, Eyman M, Lavina ZS, Gioio A, Li KW, van der Schors RC, Geraerts WP, Giuditta A, Kaplan BB, van Minnen J. Protein synthesis in synaptosomes: a proteomics analysis. *J Neurochem.* 2002 May;81(4):735-44. PubMed PMID: 12065633.

90: Jiménez CR, Burlingame AL. Ultramicroanalysis of peptide profiles in biological samples using MALDI mass spectrometry. *Exp Nephrol.* 1998 Sep-Oct;6(5):421-8. Review. PubMed PMID: 9730658.

91: Hsieh S, Dreisewerd K, van der Schors RC, Jiménez CR, Stahl-Zeng J, Hillenkamp F, Jorgenson JW, Geraerts WP, Li KW. Separation and identification of peptides in single neurons by microcolumn liquid chromatography-matrix-assisted laser desorption/ionization time-of-flight mass spectrometry and postsource decay analysis. *Anal Chem.* 1998 May 1;70(9):1847-52. PubMed PMID: 9599584.

92: Jiménez CR, Li KW, Dreisewerd K, Mansvelder HD, Brussaard AB, Reinhold BB, Van der Schors RC, Karas M, Hillenkamp F, Burbach JP, Costello CE, Geraerts WP. Pattern changes of pituitary peptides in rat after salt-loading as detected by means of direct, semiquantitative mass spectrometric profiling. *Proc Natl Acad Sci U S A*. 1997 Aug 19;94(17):9481-6. PubMed PMID: 9256508; PubMed Central PMCID: PMC23230.

93: Jiménez CR, Li KW, Dreisewerd K, Spijker S, Kingston R, Bateman RH, Burlingame AL, Smit AB, van Minnen J, Geraerts WP. Direct mass spectrometric peptide profiling and sequencing of single neurons reveals differential peptide patterns in a small neuronal network. *Biochemistry*. 1998 Feb 17;37(7):2070-6. PubMed PMID: 9485334.

94: de With ND, Li KW, Jiménez CR, Vonk N, Dreisewerd K, Hillenkamp F, Karas M, Geraerts WP. Intracellular degradation of C-peptides in molluscan neurons producing insulin-related hormones. *Peptides*. 1997;18(6):765-70. PubMed PMID: 9285923.

95: van Golen FA, Li KW, Chen S, Jiménez CR, Geraerts WP. Various isoforms of myomodulin identified from the male copulatory organ of *Lymnaea* show overlapping yet distinct modulatory effects on the penis muscle. *J Neurochem*. 1996 Jan;66(1):321-9. PubMed PMID: 8522970.

96: Li KW, Hoek RM, Smith F, Jiménez CR, van der Schors RC, van Veelen PA, Chen S, van der Greef J, Parish DC, Benjamin PR, et al. Direct peptide profiling by mass spectrometry of single identified neurons reveals complex neuropeptide-processing pattern. *J Biol Chem*. 1994 Dec 2;269(48):30288-92. PubMed PMID: 7982940.

97: Li KW, Jiménez CR, Van Veelen PA, Geraerts WP. Processing and targeting of a molluscan egg-laying peptide prohormone as revealed by mass spectrometric peptide fingerprinting and peptide sequencing. *Endocrinology*. 1994 Apr;134(4):1812-9. PubMed PMID: 8137747.

98: Bogerd J, Li KW, Jiménez CR, van der Schors RC, Ebberink RH, Geraerts WP. Processing, axonal transport and cardio regulatory functions of peptides derived from two related prohormones generated by alternative splicing of a single gene in identified neurons VD1 and RPD2 of *Lymnaea*. *Brain Res Mol Brain Res*. 1994 Apr;23(1-2):66-72. PubMed PMID: 7518031.

99: Jiménez CR, van Veelen PA, Li KW, Wildering WC, Geraerts WP, Tjaden UR, van der Greef J. Neuropeptide expression and processing as revealed by direct matrix-assisted laser desorption ionization mass spectrometry of single neurons. *J Neurochem*. 1994 Jan;62(1):404-7. PubMed PMID: 8263544.

100: Smit AB, Jiménez CR, Dirks RW, Croll RP, Geraerts WP. Characterization of a cDNA clone encoding multiple copies of the neuropeptide APGWamide in the mollusk *Lymnaea stagnalis*. *J Neurosci*. 1992 May;12(5):1709-15. PubMed PMID: 1578265.

101: Fainzilber M, Smit AB, Syed NI, Wildering WC, Hermann, van der Schors RC, Jiménez C, Li KW, van Minnen J, Bulloch AG, Ibáñez CF, Geraerts WP. CRNF, a molluscan neurotrophic factor that interacts with the p75 neurotrophin receptor. *Science*. 1996 Nov 29;274(5292):1540-3. PubMed PMID: 8929417.

102: Abdallah AM, Verboom T, Weerdenburg EM, Gey van Pittius NC, Mahasha PW, Jiménez C, Parra M, Cadieux N, Brennan MJ, Appelmelk BJ, Bitter W. PPE and PE_PGRS proteins of *Mycobacterium marinum* are transported via the type VII secretion system ESX-5. *Mol Microbiol*. 2009 Aug;73(3):329-40. doi: 10.1111/j.1365-2958.2009.06783.x. Epub 2009 Jul 7. PubMed PMID: 19602152.