

姜志宏



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簡介: 姜志宏教授於1987年畢業於中國藥科大學，1990年於同校取得碩士學位。1994年獲日本國費獎學金資助留學日本，1998在長崎大學獲得藥學博士學位。1999年至2001年間在美國哈佛醫學院生物化學與分子藥理學系進行博士後研究工作，從事抗腫瘤抗生素與小RNA形成共價鍵附加物的研究。2001年姜志宏博士受聘於香港浸會大學中醫藥學院任助理教授，2005年提升為副教授，2008年任教授。曾擔任教學部副主任和中藥學碩士課程主任。2011年7月任澳門科技大學澳門藥物及健康應用研究院院長，兼任中藥質量研究國家重點實驗室副主任，2016年3月任澳門科技大學副校長。

姜教授是國際知名的天然藥物化學家，他的研究領域包括天然藥物化學、代謝組學、中藥質量標準以及生物有機化學。為了推進中藥現代化，姜教授一直潛心以現代光譜和色譜學、化學生物學和代謝組學的研究技術闡明中藥的有效成分和作用機理，並取得卓著成果。迄今姜教授已在國際學術刊物上發表260餘篇SCI論文，引用次數達7854，他的H-index為53 (Google Scholar, 2019)。姜教授於2007年獲得國家傑出青年基金（海外），並於2014年獲聘為國家教育部長江學者講座教授，他的研究亦得到澳門科技發展基金、香港研究資助局、香港衛生署、國家自然科學基金、美國國立衛生研究院的資助。姜教授擔任一系列重要的學術職位，包括SCI刊物

“ChemMedChem”國際諮詢委員會委員和Nature Publishing Group刊物“Scientific Reports”編輯委員會委員。此外，姜教授還擔任世界中醫藥聯合會中醫藥抗炎免疫專業委員會副會長、兩岸四地中醫藥科技合作中心理事長和澳門特區政府科技委員會委員等社會職務。

教研領域：

教學科目：中藥化學；中藥分析

研究方向：天然藥物化學；代謝組學；生物有機化學；中藥質量標準

學歷：

1998.03 日本長崎大學藥學 博士學位

1990.07 中國藥科大學理學 碩士學位

1987.07 中國藥科大學理學 學士學位

教學經驗：

2015.09 -今 澳門科技大學 講座教授

2011.07 - 2015.08 澳門科技大學 教授

2008.09 - 2011.06 香港浸會大學中醫藥學院 教授

2005.07 - 2008.08 香港浸會大學中醫藥學院 副教授

2001.10 - 2005.06 香港浸會大學中醫藥學院 助理教授

1999.11 - 2001.09 哈佛醫學院生物化學與分子藥理學系 博士後

1996.10 - 2001.09 日本長崎大學藥學部 助手（文部教官）

1990.07 - 1994.03 中國藥科大學助教 講師

學術成果：

1. B. Zhou, X. Liang, Q. Feng, J. Li, X. Pan, P. Xie, **Z.-H. Jiang**, Z. Yang. Ergosterol Peroxide Suppresses Influenza A Virus-Induced Pro-inflammatory Response and Apoptosis by Blocking RIG-I Signaling. *Eur. J. Pharmacol*, 172543, 2019.

2. X. Liu, J. Yang, J. Fu, X.-J. Yao, J.-R. Wang, L. Liu, **Z.-H. Jiang**, G.-Y. Zhu. Aggreganoids A–F, Carbon-Bridged Sesquiterpenoid Dimers and Trimers from *Lindera Aggregate*. *Org. Lett*, **21**, 5753-5756, 2019.
3. C.-Y. Chen, G.-Y. Zhu, T.-G. Xie, P.-C. Jiang, J.-R. Wang, **Z.-H. Jiang**. A Phenanthroindolizidine Glycoside with HIF-1 Inhibitory Activity from *Tylophora Atrofolliculata*. *Phytochemistry Letters*, **31**, 39-42, 2019.
4. L.-F. Yau, J. Liu, M. Jiang, G. Bai, J.-R. Wang, **Z.-H. Jiang**. An Integrated Approach for Comprehensive Profiling and Quantitation of IgG-Fc Glycopeptides with Application to Rheumatoid Arthritis. *J Chromatogr B Analyt Technol Biomed Life Sci*, 64-72, 2019.
5. X. Liu, J. Yang, X. Yao, X. Yang, J. Fu, L.-P. Bai, L. Liu, **Z.-H. Jiang**, G.-Y. Zhu. Linderalides A-D, Disesquiterpenoids-Geranylbenzofuranone Conjugates from *Lindera Aggregate*. *J. Org. Chem*, **84**, 8242-8247, 2019.
6. B.-P. Xie, G.-H. Qiu, B. Sun, Z.-F. Yang, W.-H. Zhang, J.-X. Chen, **Z.-H. Jiang**. Synchronous Sensing of Three Conserved Sequences of Zika Virus Using a DNAs@MOF Hybrid: Experimental and Molecular Simulation Studies. *Inorganic Chemistry Frontiers*, **6**, 148-152, 2019.
7. H. Huang, T.-T. Tong, L.-F. Yau, C.-Y. Chen, J.-N. Mi, J.-R. Wang, **Z.-H. Jiang**. LC-MS Based Sphingolipidomic Study on A549 Human Lung Adenocarcinoma Cell Line and Its Taxol-Resistant Strain. *BMC Cancer*, **18**, 799, 2018.
8. J. M, Y. Han, Y. Xu, J. Kou, W.-J. Li, J.-R. Wang, **Z.-H. Jiang**. Deep Profiling of Immunosuppressive Glycosphingolipids and Sphingomyelins in Wild Cordyceps. *J. Agric. Food Chem.*, **66**, 8991-8998, 2018.
9. J.-R. Wang, W.-N. Gao, R. Grimm, S. Jiang, Y. Liang, H. Ye, Z.-G. Li, L.-F. Yau, H. Huang, J. Liu, M. Jiang, Q. Meng, T.-T. Tong, H.-H. Huang, S. Lee, X. Zeng, L. Liu, **Z.-H. Jiang**. Reply to 'Trace N-Glycans Including Sulphated Species May Originate from Various Plasma Glycoproteins and Not Necessarily IgG'. *Nat. Commun.*, **9**, 2915, 2018.
10. X. Liu, J. Fu, X.-J. Yao, J. Yang, L. Liu, T.-G. Xie, P.-C. Jiang, **Z.-H. Jiang**, G.-Y. Zhu.

Phenolic Constituents Isolated from the Twigs of *Cinnamomum Cassia* and Their Potential Neuroprotective Effects. *J. Nat. Prod.*, **81**, 1333-1342, 2018.

11. G.-Y. Zhu, J. Yang, X.-J. Yao, X. Yang, J. Fu, X. Liu, L.-P. Bai, L. Liu, **Z.-H. Jiang**. (+/-)-Sativamides A and B, Two Pairs of Racemic Nor-Lignanamide Enantiomers from the Fruits of *Cannabis Sativa*. *J. Org. Chem.*, **83**, 2376-2381, 2018.
12. J. Yang, J. Fu, X. Liu, **Z.-H. Jiang**, G.-Y. Zhu. Monoterpenoid Indole Alkaloids from The Leaves of *Alstonia Scholaris* and Their NF-Kappa B Inhibitory Activity. *Fitoterapia*, **124**, 73-79, 2018.
13. J.-R. Wang, W.-N. Gao, R. Grimm, S. Jiang, Y. Liang, H. Ye, Z.-G. Li, L.-F. Yau, H. Huang, J. Liu, M. Jiang, Q. Meng, T.-T. Tong, H.-H. Huang, S. Lee, X. Zeng, L. Liu, **Z.-H. Jiang**. A Method to Identify Trace Sulfated IgG N-glycans as Biomarkers for Rheumatoid Arthritis. *Nat. Commun.*, **8**, 631, 2017.
14. J. Gao, M. Chen, X.-C. Ren, X.-B. Zhou, Q. Shang, W.-Q. Lu, P. Luo, **Z.-H. Jiang**. Synthesis and Cardiomyocyte Protection Activity of Crocetin Diamide Derivatives. *Fitoterapia*, **121**, 106-111, 2017.
15. S. Parhira, G.-Y. Zhu, M. Chen, L.-P. Bai, **Z.-H. Jiang**. Cardenolides from *Calotropis Gigantea* as Potent Inhibitors of Hypoxia-inducible Factor-1 Transcriptional Activity. *J Ethnopharmacol.*, **194**, 930-936, 2016.
16. J.-N. Mi, Y. Han, Y. Xu, J. Kou, J.-R. Wang, **Z.-H. Jiang**. New Immunosuppressive Sphingoid Base and Ceramide Analogues in Wild Cordyceps. *Sci. Rep.*, **6**, 38641, 2016.
17. H. Huang, T.-T. Tong, L.-F. Yau, C.-Y. Chen, J.-N. Mi, J.-R. Wang, **Z.-H. Jiang**. LC-MS Based Sphingolipidomic Study on A2780 Human Ovarian Cancer Cell Line and its Taxol-resistant Strain. *Sci. Rep.*, **6**, 34684, 2016.
18. Q.-T. Feng, G.-Y. Zhu, W.-N. Gao, Z. Yang, N. Zhong, J.-R. Wang, **Z.-H. Jiang**. Two New Alkaloids from the Roots of *Baphicacanthus cusia*. *Chem. Pharm. Bull.*, **64**, 1505-1508, 2016.
19. J.-R. Wang, T.-T. Tong, L.-F. Yau, C.-Y. Chen, L.-P. Bai, J. Ma, M. Hu, L. Liu, **Z.-H.**

- Jiang.** Characterization of Oxygenated Metabolites of Ginsenoside Rg1 in Plasma and Urine of Rat. *J Chromatogr B Analyt Technol Biomed Life Sci*, **1026**, 75-86, 2016.
20. Q. Meng, L.-F. Yau, J.-G. Lu, Z.-Z. Wu, B.-X. Zhang, J.-R. Wang, **Z.-H. Jiang.** Chemical Profiling and Cytotoxicity Assay of Bufadienolides in Toad Venom and Toad Skin. *J Ethnopharmacol.*, **187**, 74-82, 2016.
 21. S. Parhira, G.-Y. Zhu, T. Li, L. Liu, L.-P. Bai, **Z.-H. Jiang.** Inhibition of IKK-beta by Epidioxysterols from the Flowers of *Calotropis Gigantea* (Niu jiao gua). *Chin. Med.*, **11**, 9, 2016.
 22. J. Mi, J.-R. Wang, **Z.-H. Jiang,** Quantitative Profiling of Sphingolipids in Wild Cordyceps and Its Mycelia by Using UHPLC-MS. *Sci. Rep.*, **6**, 20870, 2016.
 23. C.-Y. Chen, L.-P. Bai, Z.-F. Ke, Y. Liu, J.-R. Wang, **Z.-H. Jiang.** G-Quadruplex DNA-binding Quaternary Alkaloids from *Tylophora Atrofolliculata*. *RSC Advances*, **6**, 114135-114142, 2016.
 24. C.-Y. Chen, G.-Y. Zhu, J.-R. Wang, **Z.-H. Jiang.** Phenanthroindolizidine Alkaloids from *Tylophora Atrofolliculata* with Hypoxia-inducible Factor-1 (HIF-1) Inhibitory Activity. *RSC Advances*, **6**, 79958-79967, 2016.
 25. J. Li, B.-X. Zhou, C.-F. Li, Q.-Y. Chen, Y.-T. Wang, Z.-T. Li, T.-T. Chen, C.-G. Yang, **Z.-H. Jiang,** Nanshan Zhong, Zifeng Yang, Rongchang Chen. Lariciresinol-4-O- β -D-glucopyranoside from the Root of *Isatis Indigotica* Inhibits Influenza A Virus-induced Pro-inflammatory Response. *J. Ethnopharmacology*, **174**, 379-386, 2015.
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 27. J.-R. Wang, W.-D. Guan, L.-F. Yau, W. Gao, Y.-Q. Zhan, L. Liu, Z.-F. Yang, **Z.-H. Jiang.** Glycomic Signatures on Serum IgGs for Prediction of Postvaccination Response. *Scientific Reports*, **5**, 7648, 2015.

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29. J.-R. Wang, L.-F. Yau, T.-T. Tong, Q.-T. Feng, L.-P. Bai, J. Ma, M. Hu, L. Liu, **Z.-H. Jiang**. Characterization of Oxygenated Metabolites of Ginsenoside Rb1 in Plasma and Urine of Rat. *J. Agric. and Food Chem.*, **63**, 2689-2700, 2015.
30. L.-H. Leung, K.-W. Wong, **Z.-H. Jiang**, T. Li, L. Liu. Integrated Network-based Medicine: The Role of Traditional Chinese Medicine in Developing a New Generation of Medicine. *Science*, S16-18, 2014.
31. L.-P. Bai, Hagihara, K. Nakatani, **Z.-H. Jiang**. Recognition of Chelerythrine to Human Telomeric DNA and RNA G-quadruplexes. *Scientific Reports*, **4**, 6767, 2014.
32. J.-R. Wang, L.-F. Yau, W. Gao, Y. Liu, P.-W. Yick, L. Liu, **Z.-H. Jiang**. Quantitative Comparison and Metabolite Profiling of Saponins in Different Parts of the Root of *Panax notoginseng*. *J. Agric. and Food Chem.*, **62**, 9024-9034, 2014.
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34. S. Parhira, Z.-F. Yang, G.-Y. Zhu, Q.-L. Chen, B.-X. Zhou, Y.-T. Wang, L. Liu, L.-P. Bai, **Z.-H. Jiang**. In Vitro Anti-influenza Virus Activities of a New Lignan Glycoside from the Latex of *Calotropis gigantean*. *PLoS ONE*, **9**, e104544, 2014.
35. L.-P. Bai, H.-M. Ho, R.-X. Wang, **Z.-H. Jiang**. Mass Spectrometric Studies on Effects of Counter Ions of TMPyP4 on Binding to Human Telomeric DNA and RNA G-Quadruplexes. *Anal. Bioanal. Chem.*, **406**, 5455-5463, 2014.
36. J.-R. Wang, H. Zhang, L.-F. Yau, J. Mi, S. Lee, K.-C. Lee, P. Hu, L. Liu, **Z.-H. Jiang**. Improved Sphingolipidomic Approach Based on Ultra-High Performance Liquid Chromatography and Multiple Mass Spectrometries with Application to Cellular Neurotoxicity. *Analytical Chemistry*, **86**, 5688-5696, 2014.
37. S. Parhira, G.-Y. Zhu, R.-W. Jiang, L. Liu, L.-P. Bai, **Z.-H. Jiang**. 2-Epi-uscharin from

- the Latex of *Calotropis gigantea* with HIF-1 Inhibitory Activity. *Scientific Reports*, **4**, 4748, 2014.
38. G.-Y. Zhu, X.-J. Yao, L. Liu, L.-P. Bai, **Z.-H. Jiang**. Alistonitrine A, a Caged Monoterpene Indole Alkaloid from *Alstonia scholaris*. *Organic Letters*, **16**, 1080-1083, 2014.
39. G.-Y. Zhu, G. Chen, L. Liu, L.-P. Bai, **Z.-H. Jiang**. Lactam-bearing limonoids from the twigs and leaves of *Amoora tsangii*. *J. Nat. Prod.*, **77**, 983-989, 2014.
40. J.-R. Wang, L.-F. Yau, R. Zhang, Y. Xia, J. Ma, H.-M. Ho, P. Hu, M. Hu, L. Liu, **Z.-H. Jiang**. Transformation of Ginsenosides from *Notoginseng* by Artificial Gastric Juice Can Increase Cytotoxicity Towards Cancer Cells. *J. Agric. and Food Chem.* **62**, 2558-2573, 2014.
41. Z.-F. Yang, L.-P. Bai, W.-B. Huang, X.-Z. Li, S.-S. Zhao, N.-S. Zhong, **Z.-H. Jiang**. Comparison of in vitro antiviral activity of tea polyphenols against influenza A and B viruses and structure-activity relationship analysis. *Fitoterapia*, **93**, 47-53, 2014.
42. Q.-B. Han, W.-L. Tang, C.-X. Dong, H.-X. Xu, **Z.-H. Jiang**. An interesting two - phase solvent system and its use in preparative isolation of aconitines from aconite roots by counter - current chromatography. *J. of Separation Science*, **36**, 1304-1310, 2013.
43. L. Zhu, Q.-B. Han, H.-M. Ho, W.-L. Hsiao, **Z.-H. Jiang**. Characterization and Simultaneous Determination of Immunosuppressive Decalins in Red Yeast Rice by Ultra-high-performance Liquid Chromatography Hyphenated with Mass Spectrometry. *J. of Chromatography A*, **1303**, 54-61, 2013.
44. L.-P. Bai, H.-M. Ho, D.-L. Ma, H. Yang, W.-C. Fu, **Z.-H. Jiang**. Aminoglycosylation can enhance the G-quadruplex binding activity of epigallocatechin. *PLoS ONE*, **8**, e53962, 2013.
45. J.-G. Lu, L. Zhu, K. Lo, A. Leung, H.-M. Ho, Z. Zhao, W.-F. Fong, H. Zhang, **Z.-H. Jiang**. Chemical Differentiation of Two Taste Variants of *Gynostemma pentaphyllum* by using UPLC-Q-TOF-MS and HPLC-ELSD. *J. Agri. Food Chem.*, **61**, 90-97, 2013.

46. H. Zhang, J.-R. Wang, L. Yau, H. Ho, C. Chan, P. Hu, L. Liu, **Z.-H. Jiang**. Cellular Lipidomic Study on the A β -induced Neurotoxicity and Neuroprotective Effect of EGCG by Using UPLC/MS Based Glycerolipid Profiling and Multivariate Analysis. *Molecular BioSystems*, **8**, 3208-3215, 2012.
47. L. Zhu, L.-F. Yau, J.-G. Lu, G.-Y. Zhu, J.-R. Wang, Q.-B. Han, W. L. Hsiao, **Z.-H. Jiang**. Cytotoxic Dehydromonacolin from Red Yeast Rice. *J. Agri. Food Chem.*, **60**, 934-939, 2012.
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50. H. He, L.-P. Bai, **Z.-H. Jiang**. Synthesis and Human Telomeric G-quadruplex DNA-Binding Activity of Glucosaminosides of Shikonin/alkannin. *Bioorg. & Med. Chem. Lett.*, **22**, 1582-1586, 2012.
51. W. Yang, Y. Wong, O. T.-W. Ng, L.-P. Bai, D. W.-J. Kwong, Y. Ke, **Z.-H. Jiang**, H.-W. Li, K. K.-L. Yung, M.-S. Wong. Inhibition of Beta-Amyloid Peptide Aggregation by Multifunctional Carbazole-Based Fluorophores. *Angew. Chem. Int. Ed.*, **51**, 1804-1810, 2012.
52. Y. Liu, Z. Ke, K.-Y. Wu, S. Liu, W.-H. Chen, S. Jiang, **Z.-H. Jiang**. An Amphiphilic Conjugate Approach toward the Design and Synthesis of Betulinic Acid-Polyphenol Conjugates as Inhibitors of the HIV-1 gp41 Fusion Core Formation. *ChemMedChem*, **6**, 1654-1664, 2011.

科研項目承擔：

2017 - 今 桔梗“引藥上行”藥效物質基礎的作用機理及配伍應用的化學生物學

	研究
2014 - 2017	以免疫球蛋白糖基化為靶標的中藥有效成份活性評價及作用機理的研究
2013 - 2016	基於全成分庫的板藍根抗流感病毒藥效物質及其多靶點作用機制的研究
2012 - 2013	中藥配方顆粒的質量標準的研究
2011 - 2013	基於LC-MS和LC-NMR技術的創新脂組學分析平台的建立及其在中藥現代研究中的應用。

學術機構任職：

2014 - 2019	<i>ChemMedChem</i>	國際諮詢委員會委員
	<i>Scientific Reports</i>	編輯委員會委員
2012 - 2019	世界中醫藥聯合會中醫藥抗炎 免疫專業委員會	副會長
	兩岸四地中醫藥科技合作中心	理事長
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科研獲獎：

1. 2007 年度國家傑出青年科學基金獎
2. 2014 年度國家教育部長江學者講座教授