Curriculum Vitae of Yi Zhun Zhu

Dr. Yi Zhun Zhu is a licensed physician and Chair Professor of Pharmacology, dean of the School of Pharmacy, and associate vice president of Macau University of Science and Technology. Dr. Zhu got his Bachelor of Medicine at Shanghai Jiaotong University in 1989 and M.D./Ph.D. from the Faculty of Medicine, University of Heidelberg, Germany, in 1995. He joined as a faculty member of the Department of Pharmacology, National University of Singapore (NUS) in 1998 after postdoc training at Kiel University and industrial experience at Hoechst Marion Roussel (now Sanofi). Dr. Zhu has more than two decades teaching and research in world class universities (NUS and Fudan) and published more than 330 peer-reviewed papers with 14,968 citations (H index 66, i10 index 227 as dated on May 26, 2022) and edited 6 books for his work (2 from World Scientific Publishing) for his work. He is/was editor-in-chief for ***Cardiovasc. Regenerative Med.*** and associate editor for ***J Alzheimer Diseases***, ***Biosci. Reports*** academic editor for ***PLoS One*** and editorial board member of ***CNS Neuroscience & Therapeutics, Journal of Pharmacology and Drug Metabolism, Frontiers in Neurotrauma, etc***. Dr. Zhu has extensive experience in teaching management, and is also editor-in-chief of the national textbook of Pharmacology (7^{th} and 8^{th} edition [Chinese version] and 1^{st} edition [English version], People's Medical Publishing House). Dr. Zhu was awarded 'Lee Kuan Yew' Research fellowship from Singapore in 1998, 'A National Distinguished Young Scientist from the Natural Science Foundation of China (NSFC) in 2008, and Chief Scientist of the National Key Basic Research Program (973) and Chief-PI for the National Platform of Drug Discovery in 2009. Dr. Zhu received the National Award for Innovative Research Work of the Returnees in 2009 from the State Council and the Magnolia Golden Award from Shanghai Government in 2019. Dr. Zhu was awarded Cheung Kong

Chair Professorship in 2012 by the Ministry of Education, China. In 2014, Dr. Zhu was awarded 'The Health China' top 10 figures of the year and the Natural Science Research Award (ranked first among the Second Class of 3, top award of the year) from Macau in 2018. His research focuses on drug development, especially for the heart and brain. The original research of motherwort (transferred to the enterprise for 150 million RMB) received two clinical approvals for CFDA as a novel candidate drug and started clinical phase II trials. Phase I clinical trial, as first-in-class, will be started in the US as well with the final approval by the FDA. Another candidate drug (ZYZ-802) innovated by Dr. Zhu was also recently tech-transferred for 101 million RMB. In September 2012, the US '***Science***' magazine reported that Professor Zhu was one of the most successful Chinese returnees scientists (September 2, 2012, p. 1692). In 2017, the American Chemical Society's news journal ***'C&EN'*** featured Professor Zhu's experience in drug development and praised him as one of the pioneers of life science research in China (April 3, 2017, 27-29). Based on his successes in drug discovery, Dr. Zhu was awarded two times the Macau Natural Science Award (2018 and 2020), the highest recognition for those scientists in Macau.

Awards: (Apr 12, 2022)

1. The Lee Kuan Yew Postdoctoral Research Fellowship, Singapore (1998)
2. The National Natural Science Fund for Distinguished Young Scholars (2008)
3. The leading figure in Shanghai for Science and Research (2008)
4. The teaching excellence award of Fudan University (2008)
5. National Teaching Excellent for Pharmacology (2009)
6. The Outstanding Graduate Tutor of Fudan University (2009）
7. The National Outstanding Innovation Award for 100 Overseas Chinese by the Overseas Chinese Affairs Office of the State Council (2010)
8. Second Prize of WuXi-Tech Life Science and Chemistry Research Award (2010)
9. Cheung Kong Distinguished Professor of the Ministry of Education, China (2011)
10. The Outstanding Undergraduate Tutor of Fudan University (2013)
11. The WuXi-tech Life Science and Chemistry Research Award Scholar Award (2014）
12. The 7th Healthy China Top Ten Figures of the Year (2014)
13. The Second Prize of China Pharmaceutical Science and Technology Award (2017)
14. The 3rd Canadian International Innovation and Invention Gold Award (2018)
15. The Second Prize of the Macao Natural Science Award (the first prize is vacant, 2018)
16. Special Prize of ZhongZhu Medical Research Award (2018)
17. The 22nd Moscow 'Archimedes' International Invention Gold Award (2019)
18. Shanghai Magnolia Honor Award (the highest award) (2019)
19. Second Prize of the Macao Natural Science Award (2020)

20. 2021 Guangdong-Hong Kong-Macao Greater Bay Area High-value Patent Competition Gold Award (first place in the Biomedical Group) (2021)
21. Third Prize of the Macao Natural Science Award (2022)

Major scientific achievements:

1. Dr. Zhu discovered the first-in-class single compound *Leonurine* as a possible new target (***Stroke*** 41, 2661; ***Free Radic Bio Med.*** 54, 93; ***Pharmacol & Therapeutics*** 188: 26) for the treatment of atherosclerosis (***Atherosclerosis*** 224, 43, it was commented by Professor Catapano '*Leonurine*: a new comer in the natural compounds affecting atherosclerosis' at the same issue of page 37). The patents have been tech-transferred for about **17 million £**. It is now in Phase II clinical trial in China and the U.S. supported by the novel mechanism from clinical trials (***Clin Transl Med.*** 11: e535).
2. Dr. Zhu discovered a potential novel target of cystathionine γ-lyase (CSE, coincidently, it was interestingly rated **as one of the top 10 new drug targets by *Science*** in 2021, ***Science*** 372 (6547): 1169). CSE was first reported by Dr. Zhu's group 20 years ago (GenBank #AY879312.1). Subsequently, Dr. Zhu proposed a new theory of CSE targets as a treatment for rheumatoid disease (RA, ***Redox Biol.*** 10: 157; ***Cell Mol Immunol.*** 16: 694; ***Clin Transl Med.*** 11(11): e591; ***Clin Transl Med.*** 11(4): e376, ***Cell Mol Immunol.*** 18: 2288). Professor Dinkova-Kostova of Dundee University, published in ***Nature Reviews Drug Discovery*** (2019;18:301) described the work as a new attempt at RA therapy.
3. Dr. Zhu disclosed new mechanisms of HDAC4 in vascular inflammation (***Cardiovasc. Res.*** 114: 1016), which was commented in the same issue (page 928) **as creating a new era**; Dr. Zhu further clarified the novel relationship between vascular injury and JMJD3 (***Cardiovasc. Res.*** 114: 1894) and was also commented on the same issue (page 1825) as **unlocked the emperor's new clothes**. New mechanisms of SMYD3 in vascular aging and drug development were also first time reported by Dr. Zhu (***Aging Cell*** 19 (9): e13212; ***Aging*** 12(21): 21423 and ***Arterioscler. Thromb. Vasc. Biol.*** 41:1901).
4. Fifty-eight Ph.D., twenty-two MSc. students, and tens of postdoc. fellows were trained in Dr. Zhu's group, and five of them have become full professors in reputable academic institutions.
5. Dr. Zhu has also had an international impact in his research area. Who served as **the 8th president of the International Society for the Development of Natural Products (ISDNP)** and was actively involved in international research, e.g., he is/was **editor-in-chief (of *Cardiovascular Regenerative Medicine*), associate**

editor (the *Journal of Alzheimer Disease, Life Sciences, Biosciences Reports*), academic editor (*PLoS One*), guest editor (*Antioxidants*) and editorial board member for some decent scientific journals (***CNS Neuroscience & Therapeutics***, ***Frontiers in Neurotrauma*** and ***Acta Pharmacolgica Sinica***, etc.).

Selected 10 publications in the last 5 years:

1. Wang R, Cai JH, Chen KY, Zhu ML, Li ZY, Liu H, Liu TT, Ding Q, Mao JC, **Zhu Y.Z.*** STAT3-NAV2 axis as a new therapeutic target for rheumatoid arthritis via activating SSH1L/Cofilin-1 signaling pathway. ***Signal Transduction and Target Therapy*** 7: 209, 2022 (IF: 38.187)
2. Wu WJ, Wang JH, Xiao CX, Su HB, Zhong W, Mao JC, Liu XH, **Zhu, Y. Z.*** SMYD2-mediated TRAF2 methylation promotes the NF-κB signaling pathways in inflammatory diseases. ***Clin. Transl. Med.*** 2021;11:e591. (IF: 11.492)
3. Wang, R., Li, M., Ding, Q., Cai, J., Yu, Y., Liu, X., Mao, J., and **Zhu, Y. Z.*** (2021) Neuron navigator 2 is a novel mediator of rheumatoid arthritis. ***Cellular & Molecular Immunology*** , 2021，18: 2288–2289 (IF: 11.53)
4. Wang R, Li M, Wu WJ, Qiu YY, Hu W, Li ZY, Wang Z, Yu Y, Liao JY, Sun WY, Mao JC, **Zhu, Y. Z.*** NAV2 positively modulates inflammatory response of fibroblast-like synoviocytes through activating Wnt/β-catenin signaling pathway in rheumatoid arthritis. ***Clin Transl Med.*** 2021, 11(4): e376. (IF: 11.492)
5. Liao, JY, Suguro, R, Zhao, X, Yu, Y, Cui, YM, **Zhu, Y. Z.***.(2021) Leonurine affected homocysteine-methionine metabolism based on metabolomics and gut microbiota studies of clinical trial samples. ***Clin Transl Med.*** 2021 Oct; 11(10): e535. (IF: 11.492)
6. Yang, D., Wei, G., Long, F., Nie, H. B., Tian, X. L., Qu, L. F., Wang, S. X., Li, P., Qiu, Y., Wang, Y., Hong, W. J., Ni, T., Liu, X. H., and **Zhu, Y. Z.*** Histone methyltransferase Smyd3 is a new regulator for vascular senescence. ***Aging Cell*** 2020, 19:1-13. (IF: 9.304)
7. Rose, P., Moore, P. K., and **Zhu, Y. Z.*** Garlic and Gaseous Mediators. ***Trends Pharmacol Sci*** 2018, 39, 624-634. (IF: 14.819)
8. Yang, D., Xiao, C. X., Long, F., Su, Z. H., Jia, W. W., Qin, M., Huang, M. W., Wu, W. J., Suguro, R., Liu, X. H., and **Zhu, Y. Z.*** HDAC4 regulates vascular inflammation via activation of autophagy. ***Cardiovascular Research*** 2018, 114, 1016-1028. (IF: 10.787) **with an editorial:** The era of cardiovascular

epigenetics: histone deacetylases and vascular inflammation on the same issue pages 928–93.

9. Luo, X. L., Yang, D., Wu, W. J., Long, F., Xiao, C. X., Qin, M., Law, B. Y., Suguro, R., Xu, X., Qu, L. F., Liu, X. H., and **Zhu, Y. Z.*** Critical role of histone demethylase Jumonji domain-containing protein 3 in the regulation of neointima formation following vascular injury. ***Cardiovascular Research*** 2018, 114, 1894-1906. (IF: 10.787) **with an editorial:** JMJD3 and vascular injury: the Emperor's new clothes on the same issue pages 1825–1827
10. Rose, P., Moore, P. K., and **Zhu, Y. Z.*** H2S biosynthesis and catabolism: new insights rom molecular studies. ***Cell Mol Life Sci*** 2017, 74, 1391-1412. (IF: 9.261)

Total Publications (total 339 peer-reviewed papers with 15751 citations, H index 68, i10 index 236 as dated on Nov 22, 2022):

1. Wang R, Cai JH, Chen KY, Zhu ML, Li ZY, Liu H, Liu TT, Ding Q, Mao JC, **Zhu Y.Z.*** STAT3-NAV2 axis as a new therapeutic target for rheumatoid arthritis via activating SSH1L/Cofilin-1 signaling pathway. ***Signal Transduction and Target Therapy*** 7：209，2022.
2. Zhang, QY, Shen, ZQ, Shen, YQ, Ma, MY, Jue, H, **Zhu, Y.Z***, Guo, W. (2022) The regulatory role of MiR-203 in oxidative stress induced cell injury through the CBS/H2S pathway. *NITRIC OXIDE-BIOLOGY AND CHEMISTRY* 118,31-38
3. Pang, XC, Liu, HT, He, X, Ji, TR, **Zhu, Y.Z***, Cui, YM.(2022) Potential Anionic Substances Binding to Platelet Factor 4 in Vaccine-Induced Thrombotic Thrombocytopenia of ChAdOx1-S Vaccine for SARS-CoV-2. ***Front Immunol.*** *2021; 12: 782335*
4. Lin, ZX, Ding, Q, Li, XZ, Feng, YL, He, H, Huang, CJ, **Zhu, Y.Z***.(2022) Targeting Epigenetic Mechanisms in Vascular Aging. *FRONTIERS IN CARDIOVASCULAR MEDICINE* 8 in press
5. Yu Zhou, Xinghui Li, Wen-long Xue, Sheng Jin, Meng-yao Li, Cai-Cai Zhang, Bo Yu, Lei Zhu, Kun Liang, Ying Chen, Bei-Bei Tao, **Zhu, Y.Z***, Ming-Jie Wang, Yi-Chun Zhu. (2022) YB-1 recruits Drosha to promote splicing of pri-miR-192 to mediate the proangiogenic effects of H2S. *Antioxidants and Redox Signaling Vol. 36, in press*
6. Peng, Qian, Zhao, Bingkun, Lin, Jie, Liu, Haixia, Zhou, Rong, Lan, Dongmei, Yao, Chao, Cong, Shaohua, Tao, Shen, **Zhu, Y.Z***, Wang, Raorao, Qi, Shengcai.(2022) SPRC Suppresses Experimental Periodontitis by Modulating Th17/Treg Imbalance. *Front Bioeng Biotechnol. 2021; 9: 737334.*

7. Zhu, GH, Du, SJ, Wang, YY, Huang, XX, Hu, GW, Lu, X, Li, DJ, **Zhu, Y.Z***, Qu, D, Cai, QL, Liu, L, Du, MR. (2022) Delayed Antiviral Immune Responses in Severe Acute Respiratory Syndrome Coronavirus Infected Pregnant Mice. *Front Microbiol. 2021; 12: 806902.*
8. Yun-yun Li, Yi-kong Lin, Yue Li, Xin-hua Liu, Da-jin Li, Xiao-lin Wang, Li Wang, **Zhu, Y.Z***, Min Yu, Mei-rong Du.(2022) SCM-198 Alleviates Endometriosis by Suppressing Estrogen-ERα mediated Differentiation and Function of CD4+CD25+ Regulatory T Cells. *International Journal of Biological Sciences* 18(5):1961-1973
9. Rose, P, Moore, PK, Whiteman, M, Kirk, C, **Zhu, Y.Z***.(2021) Forum Review: Diet and Hydrogen Sulfide Production in Mammals. *ANTIOXIDANTS & REDOX SIGNALING* 34(17):1378-1393
10. Yu, Y, Wang, Z, Yang, QY, Ding, Q, Wang, R, Li, ZY, Fang, YD, Liao, JY, Qi, W, Chen, KY, Li, M, **Zhu, Y.Z***.(2021) A novel dendritic mesoporous silica based sustained hydrogen sulfide donor for the alleviation of adjuvant-induced inflammation in rats. *Cancers* 13(7),1635
11. Yu, Y, Wang, Z, Ding, Q, Yu, XB, Yang, QY, Wang, R, Fang, YD, Qi, W, Liao, JY, Hu, W, **Zhu, Y.Z*** .(2021) The Preparation of a Novel Poly(Lactic Acid)-Based Sustained H2S Releasing Microsphere for Rheumatoid Arthritis Alleviation. *PHARMACEUTICS* 13(5),742
12. Yu, Y, Wang, Z, Wang, R, Jin, J, **Zhu, Y. Z.*** (2021) Short-Term Oral Administration of Mesoporous Silica Nanoparticles Potentially Induced Colon Inflammation in Rats Through Alteration of Gut Microbiota. *INTERNATIONAL JOURNAL OF NANOMEDICINE* 16, 881-893
13. Lei, HP, Qin, M, Cai, LY, Wu, H, Tang, L, Liu, JE, Deng, CY, Liu, YB, Zhu, Q, Li, HP, Hu, W, Yang, M, **Zhu, Y. Z.***, Zhong, SL*(2021) UGT1A1 rs4148323 A Allele is Associated With Increased 2-Hydroxy Atorvastatin Formation and Higher Death Risk in Chinese Patients With Coronary Artery Disease. *FRONTIERS IN PHARMACOLOGY* 12,188
14. Wang, Xi, He, Lin, Huang, Xiaobing, Zhang, Shasha, Che, Feifei, Dai, Jingying, Cao, Wanjun, **Zhu, Y. Z.*** (2021) Recent progress of exosomes in multiple myeloma: Pathogenesis, diagnosis, prognosis and therapeutic strategies. *Cancers* 13 (7), 1635
15. Pang, X.C., Zhang, H.X., Zhang, Z., Rinkiko, S., Cui, Y.M., **Zhu, Y. Z.***. (2021) The Two-Way Switch Role of ACE2 in the Treatment of Novel Coronavirus Pneumonia and Underlying Comorbidities. *MOLECULES* 26(1), 142
16. Ali, Fayaz, Khan, Sher Bahadar, Shaheen, Nusrat, **Zhu, Y. Z.*** (2021) Eggshell membranes coated chitosan decorated with metal nanoparticles for the catalytic

reduction of organic contaminates. *Carbohydrate Polymers* 259

17. Li, M, Mao, JC, **Zhu, Y. Z.***(2021) New Therapeutic Approaches Using Hydrogen Sulfide Donors in Inflammation and Immune Response. *ANTIOXIDANTS & REDOX SIGNALING* 35(5),341-356
18. Li, XZ, Ma, ZY, **Zhu, Y. Z.*** The gut microbiome as non-invasive biomarkers for identifying overweight people at risk for osteoarthritis. *MICROBIAL PATHOGENESIS* 157,104976
19. Wang, R, Li, M, Ding, Q, Cai, JH, Yu, Y, Liu, XH, Mao, JC, **Zhu, Y. Z. *** (2021) Neuron navigator 2 is a novel mediator of rheumatoid arthritis. *CELLULAR & MOLECULAR IMMUNOLOGY* 18(9),2288-2289
20. Lin, YK, Li, YY, Li, XY, Liu, XH, Wang, XL, Yu, M, **Zhu,Y. Z. *,**Du, MR.(2021) SCM-198 ameliorates endometrial inflammation via suppressing the LPS-JNK- cJUN/cFOS-TLR4-NF-kappa B pathway. *ACTA BIOCHIMICA ET BIOPHYSICA SINICA* 53(9),1207-1215
21. Song, ZL, Song, KC, Xiao, Y, Guo, H, **Zhu, Y. Z.***, Wang, XL.(2021) Biologically Responsive Nanosystems Targeting Cardiovascular Diseases Therapy. *CURRENT DRUG DELIVERY* 18(7),880-901
22. Ding, Q, **Zhu, Y. Z.***.(2021) The Cardiovascular Effects of Hydrogen Sulfide: The Epigenetic Mechanisms. ADVANCES IN HYDROGEN SULFIDE BIOLOGY 1315,181-203
23. Li, M, Mao, JC**, Zhu, Y. Z.***,(2021) .Hydrogen Sulfide: a Novel Immunoinflammatory Regulator in Rheumatoid Arthritis. *ADVANCES IN HYDROGEN SULFIDE BIOLOGY* 1315,161-179
24. Rose, P, **Zhu, Y. Z.*,** Moore, PK.(2021) Hydrogen Sulfide and the Immune System. *ADVANCES IN HYDROGEN SULFIDE BIOLOGY* 1315,99-128
25. Liao, JY, Suguro, R, Zhao, X, Yu, Y, Cui, YM, **Zhu, Y. Z.***.(2021) Leonurine affected homocysteine-methionine metabolism based on metabolomics and gut microbiota studies of clinical trial samples. *CLINICAL AND TRANSLATIONAL MEDICINE* 11(10)
26. Liu, XY, Lang, YT, Liao, YH, **Zhu, Y. Z.***.(2021) Atezolizumab Plus Chemotherapy vs. Chemotherapy in Advanced or Metastatic Triple-Negative Breast Cancer: A Cost-Effectiveness Analysis. *FRONTIERS IN PUBLIC HEALTH* 9
27. Wu, WJ, Wang, JH, Xiao, CX, Su, ZH, Su, HB, Zhong, W, Mao, JC, Liu, XH, **Zhu, Y. Z.***.(2021) SMYD2-mediated TRAF2 methylation promotes the NF-kappa B signaling pathways in inflammatory diseases. *CLINICAL AND TRANSLATIONAL MEDICINE* 11(11),e591

28. Yu, Y, Yang, QY, Wang, Z, Ding, Q, Li, M, Fang, YD, He, QD, **Zhu, Y. Z.***.(2021) The Anti-Inflammation and Anti-Nociception Effect of Ketoprofen in Rats Could Be Strengthened Through Co-Delivery of a H2S Donor, S-Propargyl-Cysteine. *JOURNAL OF INFLAMMATION RESEARCH* 14,5863-5875

29. Lin, ZX, Chang, JS, Li, XZ, Wang, JL, Wu, XD, Liu, XY, **Zhu, Y. Z.***, Yu, XY.(2021) Association of DNA methylation and transcriptome reveals epigenetic etiology of heart failure. *FUNCTIONAL & INTEGRATIVE GENOMICS* 22(1),89-112

30. Wang, JH, Zhong, W, Su, HB, Xu, J, Yang, D, Liu, XH, **Zhu, Y. Z.***.(2021) Histone Methyltransferase Dot1L Contributes to RIPK1 Kinase-Dependent Apoptosis in Cerebral Ischemia/Reperfusion. *JOURNAL OF THE AMERICAN HEART ASSOCIATION* 10(23),e022791

31. Wang, R, Li, M, Wu, WJ, Qiu, YY, Hu, W, Li, ZY, Wang, Z, Yu, Y, Liao, JY, Sun, WY, Mao, JC, **Zhu, Y. Z.***.(2021) NAV2 positively modulates inflammatory response of fibroblast-like synoviocytes through activating Wnt/beta-catenin signaling pathway in rheumatoid arthritis. *CLINICAL AND TRANSLATIONAL MEDICINE* 11(4)

32. Long, F, Yang, D, Wang, JH, Wang, Q, Ni, T, Wei, G, **Zhu, Y. Z.***, Liu, XH.(2021) SMYD3-PARP16 axis accelerates unfolded protein response and mediates neointima formation. *ACTA PHARMACEUTICA SINICA B* 11(5),1261-1273

33. Yang, D, Su, ZH, Wei, G, Long, F, Zhu, YC, Ni, T, Liu, XH, **Zhu, Y. Z.***.(2021) H3K4 Methyltransferase Smyd3 Mediates Vascular Smooth Muscle Cell Proliferation, Migration, and Neointima Formation. *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY* 41(6),1901-1914

34. Wang, Z, Yu, Y, Liao, JY, Hu, W, Bian, XQ, Wu, JL, **Zhu, Y. Z.***.(2021) S-Propargyl-Cysteine Remodels the Gut Microbiota to Alleviate Rheumatoid Arthritis by Regulating Bile Acid Metabolism. *FRONTIERS IN CELLULAR AND INFECTION MICROBIOLOGY* 11,695

35. Xie, AJ, Mai, CT, **Zhu, Y. Z.***, Liu, XC, Xie, Y.(2021) Bile acids as regulatory molecules and potential targets in metabolic diseases. *LIFE SCIENCES* 287,120152

36. Hu, Wei,Li, Meng,Sun, Wuyi,Li, Qixiu,Xi, Haiyan,Qiu, Yuanye,Wang, Ran,Ding, Qian,Wang, Zhou,Yu, Yue,Lei, Heping,Mao, Yicheng, **Zhu Yi. Zhun.***.(2021) Hirsutine ameliorates hepatic and cardiac insulin resistance in high-fat diet-induced diabetic mice and in vitro models. *Pharmacological Research* 177,105917

37. Ali, Fayaz,Hussain, Shahid, **Zhu Yi. Zhun.***.(2021) A therapeutic journey of potential drugs against COVID-19. *Mini-Reviews in Medicinal Chemistry*

38. JianminChen,FayazAlia,ImranKhan **Zhu Yi. Zhun.***.(2021) Recent progress in the development of potential drugs against SARS-CoV-2. *Current Research in Pharmacology and Drug Discovery* 2 100057
39. Zhu, ML, Ding, Q, Lin, ZX, Chen, X, Chen, SY, **Zhu, Y. Z.***.(2021) New insights of epigenetics in vascular and cellular senescence. *JOURNAL OF TRANSLATIONAL INTERNAL MEDICINE* 9(4),239-248
40. Yang,D., Wang, Q., Wei, G., Wu, J. X., Zhu, Y. C., Zhu, Q., Ni, T., Liu, X. H., and **Zhu, Y. Z.*** (2020) Smyd3-PARP16 axis accelerates unfolded protein response and vascular aging. *Aging (Albany NY)* 12 (21), 21423-21445
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42. Huang, M. W., Wang, Q., Long, F., Di, Y., Wang, J. H., **Zhu, Y. Z.***, and Liu, X. H. (2020) Jmjd3 regulates inflammasome activation and aggravates DSS-induced colitis in mice. *Faseb J* **34**, 4107-4119
43. Xiong, Y., Chang, L. L., Tran, B., Dai, T., Zhong, R., Mao, Y. C., and **Zhu, Y. Z.*** (2020) ZYZ-803, a novel hydrogen sulfide-nitric oxide conjugated donor, promotes angiogenesis via cross-talk between STAT3 and CaMKII. *Acta Pharmacol Sin* **41**, 218-228
44. Li, Y. Y., Lin, Y. K., Liu, X. H., Wang, L., Yu, M., Li, D. J., **Zhu, Y. Z.***, and Du, M. R. (2020) Leonurine: From Gynecologic Medicine to Pleiotropic Agent. *Chin J Integr Med* **26**, 152-160
45. Wang, Z. J., Chang, L. L., Wu, J., Pan, H. M., Zhang, Q. Y., Wang, M. J., Xin, X. M., Luo, S. S., Chen, J. A., Gu, X. F., Guo, W., and **Zhu, Y. Z.*** (2020) A Novel Rhynchophylline Analog, Y396, Inhibits Endothelial Dysfunction Induced by Oxidative Stress in Diabetes Through Epidermal Growth Factor Receptor. *Antioxid Redox Sign* **32**, 743-765
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47. Long, F., Wang, Q., Yang, D., Zhu, M. L., Wang, J. H., **Zhu, Y. Z.***, and Liu, X. H. (2020) Targeting JMJD3 histone demethylase mediates cardiac fibrosis and cardiac function following myocardial infarction. *Biochemical and biophysical research communications* **528**, 671-677
48. Pang, X. C., Cui, Y. M., and **Zhu, Y. Z.*** (2020) Recombinant human ACE2:

potential therapeutics of SARS-CoV-2 infection and its complication. *Acta Pharmacol Sin* **41**, 1255-1257

49. Ning, K., Wang, M. J., Lin, G., Zhang, Y. L., Li, M. Y., Yang, B. F., Chen, Y., Huang, Y., Li, Z. M., Huang, Y. J., Zhu, L., Liang, K., Yu, B., **Zhu, Y. Z.***, and Zhu, Y. C. (2020) eNOS-Nitric Oxide System Contributes to a Novel Antiatherogenic Effect of Leonurine via Inflammation Inhibition and Plaque Stabilization. *J Pharmacol Exp Ther* **373**, 463-475
50. Yang, D., Wei, G., Long, F., Nie, H. B., Tian, X. L., Qu, L. F., Wang, S. X., Li, P., Qiu, Y., Wang, Y., Hong, W. J., Ni, T., Liu, X. H., and **Zhu, Y. Z.*** (2020) Histone methyltransferase Smyd3 is a new regulator for vascular senescence. *Aging Cell* **19:**1-13
51. An, P. J., **Zhu, Y. Z.***, and Yang, L. P. (2020) Biochemical indicators of coronavirus disease 2019 exacerbation and the clinical implications. *Pharmacol Res* **159**, 104946
52. Luo, S., Xu, S., Liu, J., Ma, F., and **Zhu, Y. Z.*** (2020) Design and synthesis of novel SCM-198 analogs as cardioprotective agents: Structure-activity relationship studies and biological evaluations. *Eur J Med Chem* **200**, 112469
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54. Yang, D., Wang, Q., Wei, G., Wu, J., Zhu, Y. C., Zhu, Q., Ni, T., Liu, X., and **Zhu, Y. Z.*** (2020) Smyd3-PARP16 axis accelerates unfolded protein response and vascular aging. *Aging* **12**, 21423-21445
55. Qin, M., Long, F., Wu, W. J., Yang, D., Huang, M. W., Xiao, C. X., Chen, X., Liu, X. H., and **Zhu, Y. Z.*** (2019) Hydrogen sulfide protects against DSS-induced colitis by inhibiting NLRP3 inflammasome. *Free Radical Bio Med* **137**, 99-109
56. Guo, W., Li, D., You, Y., Li, W. Z., Hu, B., Zhang, S. L., Miao, L., Xian, M., **Zhu, Y. Z.***, and Shen, X. Y. (2019) Cystathionine -lyase deficiency aggravates obesity-related insulin resistance via FoxO1-dependent hepatic gluconeogenesis. *Faseb J* **33**, 4212-4224
57. Chang, L. L., Wang, Z. J., Ma, F. F., Tran, B., Zhong, R., Xiong, Y., Dai, T., Wu, J., Xin, X. M., Guo, W., Xie, Y., Mao, Y. C., and **Zhu, Y. Z.*** (2019) ZYZ-803 Mitigates Endoplasmic Reticulum Stress-Related Necroptosis after Acute Myocardial Infarction through Downregulating the RIP3-CaMKII Signaling Pathway. *Oxidative medicine and cellular longevity* **2019**
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