Tiannan Guo, MD, PhD 郭天南博士
Assistant Professor at Westlake University 助理教授 西湖大学
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Bio:

Tiannan received training of clinical medicine (1999-2006) in Tongji Medical College, Huazhong University of Science and Technology, and learned biology (2001-2005) in Wuhan University, before he moved to Singapore for PhD training in cancer proteomics (2008-2012) in the laboratories of Dr. Newman Sze in Nanyang Technological University and Dr.Oi Lian Kon in National Cancer Centre Singapore. In 2012, Tiannan started his postdoctoral training in the laboratory of Dr. Ruedi Aebersold in ETH Zurich. Tiannan moved to Sydney as the Scientific Director of ProCan, group leader of Cancer Proteome, Children's Medical Research Institute, conjoint senior lecturer in The University of Sydney Medical School, in March 2017. Tiannan joined the Westlake Institute for Advanced Studies, Westlake University in August 2017 as a Tenure Track Assistant Professor. More in www.guomics.com.

Education

PhD (*2008 August – 2012 April)*
Nanyang Technological University, Singapore

Clinical Medicine *(1999 September – 2006 June)*
Tongji Medical School, Huazhong University of Science and Technology

Bachelor of Biology, 2nd major *(2001 September – 2005 June)*
Wuhan University

Working Experience

Founder *(Jul 2021 - present)*
Westlake Omics Inc

Principal Investigator, Assistant Professor *(Aug 2017- present)*
Westlake Institute for Advanced Study, Westlake University

Adjunct Principal Investigator *(Aug 2017- present)*
Fudan University

Adjunct Principal Investigator *(Aug 2017- present)*
Zhejiang University

Group leader, Cancer Proteome Group *(March – July 2017)*
Children's Medical Research Institute, The University of Sydney

Scientific Director *(March – July 2017)*
ProCan, The Proteome of human Cancers
Children's Medical Research Institute, The University of Sydney

Conjoint senior lecturer *(March – July 2017)*
Sydney Medical School, The University of Sydney

Postdoctoral researcher (*April 2012 – March 2017)*

ETH Zurich, Switzerland

Research officer (*August 2011– December 2011)*
National Cancer Centre Singapore

Research officer (*January 2007– August 2008)*
National Cancer Centre Singapore

Research assistant (*June 2006– January 2007)*
Union Hospital, Huazhong University of Science and Technology

Five representative publications

1. Yi Zhu, Ruedi Aebersold, Matthias Mann, **Tiannan Guo***. Snapshot: Clinical proteomics. ***Cell.*** 2021.184(18): 4840-4840.
2. Xiu Nie[#], Liujia Qian[#], Rui Sun[#], Bo Huang[#], et al, Yi Zhu*, Jiahong Xia*, Yu Hu*, **Tiannan Guo***. Multi-organ Proteomic Landscape of COVID-19 Autopsies. ***Cell***. 2021.184(3): 775-791.
3. Bo Shen [#], Xiao Yi [#], Yaoting Sun [#], Xiaojie Bi [#], Juping Du [#], Chao Zhang [#], Sheng Quan [#], et al, Yi Zhu *, Huafen Liu *, Haixiao Chen *, **Tiannan Guo** *.Proteomic and Metabolomic Characterization of COVID-19 Patient Sera. ***Cell***. 2020.182(1): 59-72.
4. Fangfei Zhang [#], Shaoyang Yu [#], Lirong Wu [#], et al, Stan Z. Li *, Zhongzhi Luan *, **Tiannan Guo** *. Phenotype Prediction using a Tensor Representation and Deep Learning from Data Independent Acquisition Mass Spectrometry. ***Journal of American Society of Mass Spectrometry***. 2020.31(11):2296-2304.
5. **Tiannan Guo**, et al, Ruedi Aebersold. *Rapid mass spectrometric conversion of tissue biopsy samples into permanent quantitative digital proteome maps*. ***Nature Medicine***. 2015.21(4):407–413.

All publications

[Note: *, co-corresponding; [#], co-first author]

1. Georg Kustatscher, Tom Collins, Anne-Claude Gingras, **Tiannan Guo,** Henning Hermjakob, Trey Ideker, Kathryn S. Lilley, Emma Lundberg, Edward M. Marcotte, Markus Ralser, Juri Rappsilber. An invitation to help define the challenge and goals for an understudied proteins initiative. ***Nature Biotechnology.*** In press.
2. sRAGE alleviates SARS-CoV-2-induced pneumonia in hamster by Rui-Ping Xiao, Xiuqin Zhang, Dan Li, Rui Sun, Xinli Hu, Zhiqi Song, Xiaotian Ni, Hua Zhu, **Tiannan Guo**, Chuan Qin, Ruiping Xiao. ***Signal Transduction and Targeted Therapy.*** Accepted. 2022. In Press.
3. Yingkuan Shao[#], Kailun Xu[#], Xi Zheng, Biting Zhou, Xiuli Zhang, Lin Wang, Yaoting Sun, Dan Li, Ting Chen, Jian Wang, Shaojun Yu, Lifeng Sun, Xiaoming Xu, Shaozhi Dai, Huanhuan Gao, Guan Ruan, Wei Liu, Xue Cai, Tiansheng Zhu, Lina Qi, Jiani Chen, Wangxiong Hu, Xingyue Weng, Yi Zhu, Xueping Xiang, Zhiyuan Hu, Jinfan Li, Lirong Chen, Jimin Shao*, Shu Zheng*, **Tiannan Guo***. Proteomics profiling of colorectal cancer progression identifies PLOD2 as a potential therapeutic target. ***Cancer Commun.*** 2021. https://doi.org/10.1002/cac2.12240.
4. Yi Zhu, Ruedi Aebersold, Matthias Mann, **Tiannan Guo***. Snapshot: Clinical proteomics. ***Cell.*** 2021.184(18): 4840-4840.
5. Ying Zhang, Xue Cai, Weigang Ge, Donglian Wang, Guangjun Zhu, Liujia Qian, Nan Xiang, Liang Yue, Shuang Liang, Fangfei Zhang, Jing Wang, Kai Zhou, Yufen Zheng, Minjie Lin,Tong Sun, Ruyue Lu, Chao Zhang, Luang Xu, Yaoting Sun, Xiaoxu Zhou, Jing Yu, Lyv engge , Zhu BoShen, Xu Hongguo, Yi Zhu, Jiaqin, **Tiannan Guo**. Feasibility to reduce swab RT-PCR tests by serum proteomics for COVID-19 disease course monitoring. ***J Prot Res***. Available at SSRN: https://ssrn.com/abstract=3786009 or http://dx.doi.org/10.2139/ssrn.3786009.
6. Yong Ding, Shijian Ruan, Yubizhuo Wang, Jiayuan Shao, Rui Sun, Wuwei Tian, Nan Xiang, Weigang Ge, Xiuming Zhang, Kunkai Su, Jingwen Xia, Qiang Huang, Weihai Liu, Qinxue Sun, Haibo Dong*, Mylène C.Q. Farias, **Tiannan Guo***, Andrey S. Krylov, Wenjie Liang*, Wenbo Xiao, Xueli Bai, Tingbo Liang*. Novel deep learning radiomics model for preoperative evaluation of hepatocellular carcinoma differentiation based on computed tomography data. ***Clinical***

Translation Medicine. 2021 Nov 6.11(11): e570.

7. Weijia Kong, Bertrand Jern, Han Wong, Huanhuan Gao, **Tiannan Guo**, Xianming Liu, Xiaoxian Du, Limsoon Wong*, Wilson Wen Bin Goh*. PROTREC: A probability-based approach for recovering missing proteins based on biological networks. ***Journal of Proteomics***. 2022. 250: 104392.
8. Rui Sun, Mengge Lyu, Shuang Liang, Weigang Ge, Yingrui Wang, Xuan Ding, Cheng Zhang, Yan Zhou, Shanjun Chen, Lirong Chen, **Tiannan Guo**. A prostate cancer tissue specific spectral library for targeted proteomic analysis. ***Proteomics***. 2021 Nov 20:e2100147. doi: 10.1002/pmic.202100147. Epub ahead of print. PMID: 34799972.
9. Weigang Ge [#], Xiao Liang [#], Fangfei Zhang [#], Yifan Hu [#], Luang Xu, Nan Xiang, Rui Sun, Wei Liu, Zhangzhi Xue, Xiao Yi, Yaoting Sun, Bo Wang, Jiang Zhu, Cong Lu, Xiaolu Zhan, Lirong Chen, Yan Wu, Zhiguo Zheng, Wangang Gong, Qijun Wu, Jiekai Yu, Zhaoming Ye, Xiaodong Teng, Shiang Huang, Shu Zheng, Tong Liu*, Chunhui Yuan*, **Tiannan Guo***. Computational Optimization of Spectral Library Size Improves DIA-MS Proteome Coverage and Applications to 15 Tumors. ***J Prot Res***. 2021 DOI: 10.1021/acs.jproteome.1c00640. Epub ahead of print. PMID: 34748352.
10. Wei Liu[#], Yaoting Sun, Weigang Ge, Fangfei Zhang, Lin Gan, Yi Zhu, **Tiannan Guo***, Kexin Liu*. DIA-based Proteomics Identifies IDH2 as a Targetable Regulator of Acquired Drug Resistance in Chronic Myeloid Leukemia. ***Mol Cell Prot.*** available at bioRxiv, 2021. DOI: 10.1101/2021.04.08.438976**.**
11. Xiaojie Bi[#], Wei Liu[#], Xuan Ding[#], Shuang Liang[#], Yufen Zheng[#], Xiaoli Zhu[#], Sheng Quan[#], Xiao Yi, Nan Xiang, Juping Du, Haiyan Lyu, Die Yu, Chao Zhang Luang Xu, Weigang Ge, Jiale He, Guangjun Zhu, Donglian Wang, Hongguo Zhu, Shiyong Chen, Jun Li, Haihong Zhao, Yi Zhu*, Huafen Liu*, Jiaqin Xu*, Bo Shen*, **Tiannan Guo***. Proteomic and metabolomic profiling of urine uncovers immune responses in COVID-19. ***Cell Reports***. 2021 DOI : 10.5281/zenodo.5642580.
12. Joris Cadow, Matteo Manica, Roland Mathis, **Tiannan Guo**, Ruedi Aebersold and Maria Rodriguez Martinez. On the Feasibility of Deep Learning Applications Using Raw Mass Spectrometry Data. ***Bioinformatics***. 2021. 37(Suppl_1): i245–i253.
13. Michael C. Haffner*, Akshay Bhamidipati, Harrison K. Tsai, David M. Esopi*, Ajay M. Vaghasia, Jin-Yih Low, Radhika A. Patel, Tam Pham, Nicole Castagna, Jessica Hicks, Nicolas Wyhs, Rudolf Aebersold, Angelo M. De Marzo, William G. Nelson, **Tiannan Guo** and Srinivasan Yegnasubramanian*. Phenotypic characterization of two novel cell line models of castration resistant prostate cancer. ***The Prostate***. 2021 Nov 1. 81(15):1159-1171.
14. Kai Zhou[#], Yaoting Sun[#], Lu Li[#], Zelin Zang[#], Jing Wang[#], Jun Li[#], Junbo Liang[#], Fangfei Zhang, Qiushi Zhang, Weigang Ge, Hao Chen, Xindong Sun, Liang Yue, Xiaomai Wu, Bo Shen, Jiaqin Xu, Hongguo Zhu, Shiyong Chen, Hai Yang, Shigao Huang, Minfei Peng, Dongqing Lv, Chao Zhang, Haihong Zhao, Luxiao Hong, Zhehan Zhou, Haixiao Chen, Xuejun Dong, Chunyu Tu, Minghui Li, Yi Zhu*, Baofu Chen*, Stan Z. Li*, **Tiannan Guo***. Eleven Routine Clinical Features Predict COVID-19 Severity. ***Computational and Structural Biotechnology Journal.*** 2021. 19:3640-3649.
15. Qi Xiao, Fangfei Zhang, Luang Xu, Liang Yue, Oi Lian Kon, Yi Zhu*, **Tiannan Guo***. High-Throughput Proteomics and AI for Cancer Biomarker Discovery. ***Advanced Drug Delivery Reviews***. 2021 Sep. 176: 113844.
16. Zhengmin Wang[#], Yifan Yuan[#], Xiong Ji[#], Xing Xia[#], Zhujun Li, Xiao Yi, Yi Zhu, **Tiannan Guo**, Yin Wang, Liang Chen*, Ying Liu*. The Hippo-TAZ axis mediates vascular endothelial growth factor C in glioblastoma-derived exosomes to promote angiogenesis. ***Cancer Letters***. 2021 513: 1-13.
17. Haixi Yan[#], Xiao Liang[#], Juping Du[#], Zebao He[#], Yu Wang, Mengge Lyu ,Liang Yue, Fangfei Zhang, Zhangzhi Xue, Luang Xu, Guan Ruan, Jun Li, Hongguo Zhu, Jiaqin Xu, Shiyong Chen, Chao Zhang, Dongqing Lv ,Zongmei Lin, Bo Shen, Yi Zhu*, Biyun Qian*, Haixiao Chen*, **Tiannan Guo**. Proteomic and Metabolomic Investigation of COVID-19 Patients with Elevated Serum Lactate Dehydrogenase. ***Proteomics***. 2021. 21(15): e2100002.
18. Wanglong Gou[#], Yuanqing Fu[#], Liang Yue[#], Geng-dong Chen[#], Xue Cai[#], Menglei Shuai[#], Fengzhe Xu[#], Xiao Yi, Hao Chen, Yi Zhu, Mian-li Xiao, Zengliang Jiang, Zelei Miao, Congmei Xiao, Bo Shen, Xiaomai Wu, Haihong Zhao, Wenhua Ling, Jun Wang*, Yu-ming Chen*, **Tiannan Guo***, Ju-Sheng Zheng*. Gut microbiota may underlie the predisposition of healthy individuals to COVID-19. ***Journal of Genetics and Genomics***. 2021 48(9): 792-802.

19. Liujia Qian, **Tiannan Guo**. Immunometabolism the CyTOF way. ***Immunity***. 2021 54(4): 610-613.
20. Xiu Nie[#], Liujia Qian[#], Rui Sun[#], Bo Huang[#], Xiaochuan Dong[#], Qi Xiao[#], Qiushi Zhang[#], Tian Lu, Liang Yue, Shuo Chen, Xiang Li, Yaoting Sun, Li Lu, Luang Xu, Li Yan, Ming Yang, Zhangzhi Xue, Shuang Liang, Xuan Ding, Chunhui Yuan, Li Peng, Wei Liu, Xiao Yi, Mengge Lyu, Guixiang Xiao, Xia Xu, Weigang Ge, Jiale He, Jun Fan, Junhua Wu, Meng Luo, Xiaona Chang, Huaxiong Pan, Xue Cai, Junjie Zhou, Jing Yu, Huanhuan Gao, Mingxing Xie, Sihua Wang, Guan Ruan, Hao Chen, Hua Su, Heng Mei, Danju Luo, Dashi Zhao, Fei Xu, Yan Li, Yi Zhu*, Jiahong Xia*, Yu Hu*, **Tiannan Guo**. Multi-organ Proteomic Landscape of COVID-19 Autopsies. ***Cell***. 2021 Feb.184(3): 775-791.e14.
21. Bo Shen [#], Xiao Yi [#], Yaoting Sun [#], Xiaojie Bi [#], Juping Du [#], Chao Zhang [#], Sheng Quan [#], Fangfei Zhang, Rui Sun, Liujia Qian, Weigang Ge, Wei Liu, Shuang Liang, Hao Chen, Ying Zhang, Jun Li, Jiaqin Xu, Zebao He, Baofu Chen, Jing Wang, Haixi Yan, Yufen Zheng, Donglian Wang, Jiansheng Zhu, Ziqing Kong, Zhouyang Kang, Xiao Liang, Xuan Ding, Guan Ruan, Nan Xiang, Xue Cai, Huanhuan Gao, Lu Li, Sainan Li, Qi Xiao, Tian Lu, Yi Zhu*, Huafen Liu*, Haixiao Chen*, **Tiannan Guo***. Proteomic and Metabolomic Characterization of COVID-19 Patient Sera. ***Cell***. 2020 Jul.182(1): 59-72.
    - The first molecular characterization of COVID-19 sera. Highlighted by NIH director
22. Konstantina Charmpi[#], **Tiannan Guo***[#], Qing Zhong, Ulrich Wagner, Rui Sun, Nora C Toussaint, Christine Fritz, Chunhui Yuan, Hao Chen, Niels J Rupp, Ailsa Christiansen, Dorothea Rutishauser, Jan H Ruschoff, Christian Fankhauser, Karim Saba, Cedric Poyet, Thomas Hermanns, Kathrin Oehl, Ariane Leoni Moore, Christian Beisel, Laurence Calzone, Loredana Martignetti, Qiushi Zhang, View ORCID Profile Yi Judy Zhu, Maria Rodriguez Martinez, Matteo Manica, Michael C Haffner, Ruedi Aebersold*, Peter J Wild*, Andreas Beyer*. Convergent network effects along the axis of gene expression during prostate cancer progression. ***Genome Biology***. 2020 Dec.21(1): 302.
23. Wenguang Shao [#], **Tiannan Guo** [#]*, Nora C Toussaint, Peng Xue, Ulrich Wagner, Li Li, Konstantina Charmpi, Yi Zhu, Jianmin Wu, Maria Buljan, Rui Sun, Dorothea Rutishauser, Thomas Hermanns, Christian Daniel Fankhauser, Cedric Poyet, Jelena Ljubicic, Niels Rupp, Jan H. Rüschoff, Qing Zhong, Andreas Beyer, Jaifu Ji, Ben C. Collins, Yansheng Liu, Gunnar Rätsch, Peter J. Wild *, Ruedi Aebersold *. *Comparative analysis of mRNA and protein degradation in prostate tissues indicates high stability of proteins.* ***Nature Communications***. 2019. 10(1):2524.
    - This paper establishes the first protein degradation index and showed the stability of proteins in clinical tissue samples for biomarker discovery.
24. Yi Zhu [#], Tobias Weiss [#], Qiushi Zhang, Rui Sun, Bo Wang, Xiao Yi, Zhicheng Wu, Huanhuan Gao, Xue Cai, Guan Ruan, Tiansheng Zhu, Chao Xu, Sai Lou, Xiaoyan Yu, Ludovic Gillet, Peter Blattmann, Karim Saba, Christian D. Fankhauser, Michael B. Schmid, Dorothea Rutishauser, Jelena Ljubicic, Ailsa Christiansen, Christine Fritz, Niels J. Rupp, Cedric Poyet, Elisabeth Rushing, Michael Weller, Patrick Roth, Eugenia Haralambieva, Silvia Hofer, Chen Chen, Wolfram Jochum, Xiaofei Gao, Lirong Chen, Qing Zhong, Peter J. Wild *, Ruedi Aebersold *, **Tiannan Guo** *. High-throughput Proteomic analysis of FFPE tissue samples facilitates tumor stratification. ***Molecular Oncology***. 2019 Sep;13(11): 2305-2328.
    - This paper establishes the PCT-SWATH® technology for high-throughput analysis of biopsy-level FFPE tissue samples. It allows proteome digitalization of the FFPE biobanks for biomarker discovery. It has been selected as the cover article for Molecular Oncology.
25. Tiansheng Zhu, Hao Chen, Xishan Yan, Zhicheng Wu, Xiaoxu Zhou, Qi Xiao, Weigang Ge, Qiushi Zhang, Chao Xu, Luang Xu, Guan Ruan, Zhangzhi Xue, Chunhui Yuan*, Guo-Bo Chen* and **Tiannan Guo***. ProteomeExpert: A Docker image-based web server for exploring, modeling, visualizing, and mining quantitative proteomic datasets. ***Bioinformatics***. 2021 Jan.37(2):273-275.
26. Tiansheng Zhu, Rui Sun, Fangfei Zhang, Guo-Bo Chen, Xiao Yi, Guan Ruan, Chunhui Yuan, Shuigeng Zhou*, **Tiannan Guo***. BatchServer: a web server for batch effect evaluation, visualization and correction. ***Journal of Proteome Research***. 2020 Dec. 20(1):1079-1086.
27. Fangfei Zhang [#], Shaoyang Yu [#], Lirong Wu [#], Zelin Zang, Xiao Yi, Jiang Zhu, Cong Lu, Ping Sun, Yaoting Sun, Sathiyamoorthy Selvarajan, Lirong Chen, Xiaodong Teng, Yongfu Zhao, Guangzhi Wang, Junhong Xiao, Shiang Huang, Oi Lian Kon, Gopalakrishna N. Iyer, Stan Z. Li*, Zhongzhi Luan*, **Tiannan Guo***. Phenotype classification using proteome data in a data-

independent acquisition Tensor format. ***Journal of American Society of Mass Spectrometry***. 2020 Oct.31(11):2296-2304. (**Representative Publication**)

- DIAT bridges proteomic big data and AI. Patent issued and transferred

28. Liang Yue [#], Fangfei Zhang [#], Rui Sun, Yaoting Sun, Chunhui Yuan, Yi Zhu, **Tiannan Guo***. Generating Proteomic Big Data for Precision Medicine. ***Proteomics***. 2020 Nov. 20(21-22): e1900358.
    - Introduce the concept of "proteomic big data". Selected as Back Cover of this issue.
29. Xi Zheng [#], Kailun Xu [#], Biting Zhou[#], Ting Chen, Yanqin Huang, Qilong Li, Fei Wen, Weiting Ge, Jian Wang, Shaojun Yu, Lifeng Sun, Liang Zhu, Wei Liu, Huanhuan Gao, Liang Yue, Xue Cai, Qiushi Zhang, Guan Ruan, Tiansheng Zhu, Zhicheng Wu, Yi Zhu, Yingkuan Shao *, **Tiannan Guo** *, Shu Zheng *. A circulating extracellular vesicles-based novel screening tool for colorectal cancer revealed by shotgun and data-independent acquisition mass spectrometry. ***Journal of Extracellular Vesicles***. 2020.9(1):1750202.
30. Fangfei Zhang, Weigang Ge, Guan Ruan, Xue Cai, **Tiannan Guo***. Data-Independent Acquisition Mass Spectrometry-Based Proteomics and Software Tools: a Glimpse in 2020. ***Proteomics***. 2020.20(17-18):e1900276.
31. Cai, Xue [#]; Ge, Weigang [#]; Yi, Xiao; Sun, Rui; Zhu, Jiang; Lu, Cong; Sun, Ping; Zhu, Tiansheng; Ruan, Guan; Yuan, Chunhui; Liang, Shuang; Lyu, Mengge; Huang, Shiang; Zhu, Yi *; **Guo, Tiannan** *. PulseDIA: Data-Independent Acquisition Mass Spectrometry Using Multi-Injection Pulsed Gas-Phase Fractionation. ***Journal of Proteome Research***. 2021.20(1):279-288. (Patent issued and transferred)
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34. **Tiannan Guo***[#], Augustin Luna[#], Vinodh Rajapakse[#], Ching Chiek Koh[#], Zhicheng Wu, Wei Liu, Yaoting Sun, Huanhuan Gao, Michael Patrick Menden, Chao Xu, Laurence Calzone, Loredana Martignetti, Chiara Auwerx, Marija Buljan, Amir Banaei-Esfahani, Alessandro Ori, Murat Iskar, Ludovic Gillet, Ran Bi, Jiangnan Zhang, Huanhuan Zhang, Chenhuan Yu, Qing Zhong, Sudhir Varma, Uwe Schmitt, Peng Qiu, Qiushi Zhang, Yi Zhu, Peter J. Wild, Mathew J. Garnett, Peer Bork, Martin Beck, Kexin Liu, Julio Saez-Rodriguez, Fathi Elloumi, William C. Reinhold, Chris Sander, Yves Pommier*, Ruedi Aebersold*. Quantitative Proteome Landscape of the NCI-60 Cancer Cell Lines. ***iScience.*** 2019 Nov 22;21:664-680.
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Tiannan Guo*. *DPHL: A pan-human protein mass spectrometry library for robust biomarker discovery.* ***Genomics, Proteomics and Bioinformatics***. 2020. 18(2): 104-119.

- This paper reports the most comprehensive human tissue DIA library from over 1000 DDA analysis from 16 human tissue types collected from over 20 clinical centers.

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    - This paper establishes the PCT-SWATH® technology for high-throughput analysis of biopsy-level fresh frozen tissue samples. It has been the base technology for ProCan® at the Children's Medical Research Institute, The University of Sydney.
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Qing Zhong, Christian Fankhauser, Christine Fritz, Cédric Poyet, Ulrich Wagner, **Tiannan Guo**, Ruedi Aebersold, Levi A. Garraway, Peter J. Wild, Jean-Philippe Theurillat*, Myles Brown*. TRIM24 is an oncogenic transcriptional activator in prostate cancer. ***Cancer Cell***. 2016.29(6): 846-858.

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65. Zhu Y, **Guo T**, Sze SK*. Elucidating structural dynamics of integral membrane proteins on native cell surface by hydroxyl radical footprinting and nano LC-MS/MS. ***Methods in Molecular Biology*** 2011.790(5): 287-303.
66. Zhang H, **Guo T**, Li X, Datta A, Park JE, Yang J, Lim SK, Tam JP, Sze SK*. Simultaneous characterization of glyco- and phospho-proteomes of mouse brain membrane proteome with electrostatic repulsion hydrophilic interaction chromatography (ERLIC). ***Molecular & Cellular Proteomics.*** 2010**.** 9(4):635-647.

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Academic Awards

1. 2011 Ray Wu Prize. Ray Wu Memorial Fund 吴瑞奖学金
2. 2010 Chinese Government Award for Outstanding Self-financed Students Abroad. China Scholarship Council 国家优秀自费留学生奖
3. 2018 Hangzhou 521 Talent Program 杭州 521 人才计划
4. 2018 Zhejiang Province 1000 talent Program 2018 浙江千人计划
5. 2018 Zhejiang Province Outstanding Youth Scholar Program 浙江省杰出青年基金
6. 2020 Zhejiang Province Talent Program2020 浙江省顶尖人才项目
7. 2021 Elsevier China Top OA Author Award (2020-2021 Life Sciences)

Other awards

1. HUPO tagline competition award: “translating the code of life” 2015.
2. Hubei Provincial Committee in Zhejiang Province: ‘Heroes in Harm’s way’ 2020. 浙江大学湖北共青团最美逆行者奖。
3. Outstanding teachers in Hangzhou Education. 2020. 杭州市教育局系统优秀教师
4. 科技部 2021 年 全国科技系统抗击新冠肺炎疫情先进个人

Editorial board

Clinical Proteomics (Jan 2021-) Associate editor
Genomics, Proteomics and Bioinformatics (May 2021 -)
Cell Reports Medicine (May.2021-) (Advisory board)

Grant reviewer for

Czech Health Research Council; MRC (UK); French National Research Agency (ANR); Austrian Science Fund.

Ad hoc journal reviewer for

Nature; Cell; Nature Biotechnology; Nature Medicine; Gut; Nature Communications; Nature Metabolism; Cell Research; Science Translational Medicine; eLife; Lancet Digital Health; Cell Discovery; Bioinformatics; Trends in Analytical Chemistry; Scientific Data; Mol Cell Proteomics; Molecular Oncology;

Nucleic Acids Research; Cell Reports; Journal of Proteome Research; Proteomics; Clinical Proteomics; Analytical Chemistry; Genomics, Proteomics & Bioinformatics; Expert Review of Proteomics; Journal of American Society for Mass Spectrometry; Journal of Proteomics; Prostate; Scientific Report; Journal of Molecular Cell Biology; Journal of Clinical Immunology; Blood Advances; Signal Transduction and Targeted Therapy; Science China Life Sciences; Cell Reports Medicine; Cell Metabolism; Nature Communications; JOCI; Urine; Carcinogens; Analytical Biochemistry; EBiomedicine; Composites Part B: Engineering, Journal of Mass Spectrometry and Advances in the Clinial Lab, Chinese Medicine, etc.

Roles in social organizations

1. 杭州欧美同学会副会长。2022-current
2. 杭州市留联会第五届理事会，常务理事。2021-current
3. Zhejiang Association of Scholars (Youth branch) from Overseas, 浙江省海高会青年分会。副秘书长。Deputy Secretary-General: Aug.28.2020 – current.
4. 凤凰中心科技委员会，委员。2019—current.

Roles in academic organizations

1. 浙江省病原微生物实验室生物安全质量控制中心 委员（2021-）
2. CNHUPO 秘书长 Secretary General. 2021-
3. HUPO 2021 Organizing Committee：2021
4. HUPO Marketing and Membership Committee: 2021-current.
5. Council member (HUPO): 2021 – current.
6. HUPO B/D cancer HPP co-chair: 2021 – current.
7. 浙江省疾病蛋白质组重点实验室，学术委员会委员: 2021-present
8. Chinese Neuroscience Society (Basic research and Clinic): 中国神经科学协会基础与临床分会委员。Council member. 2020 – current.
9. Zhejiang Math-Physics Big Data Society. 浙江省数理协会医学大数据分会专委会成员 Council member: 2020- current.
10. Scholarship Committee Member of the Liver of The Affiliated Hospital of Hangzhou Normal University 杭州师范大学附属医院肝病学术委员会委员: 24.04.2021- current.
11. Academic Committee Member of Taizhou Key Laboratory 台州市重点实验室学术委员会委员: 24.04.2021- current.
12. Academic Committee Member of Mass Spectrometry Branch of the Chinese Physical Society.中国物理学会质谱分会学术委员：2021.1-2021.12

Academic memberships

1. The American Association for the Advancement of Science: May 2018- current
2. Chinese Human Proteome Organization. 2017- current
3. Human Proteome organization (HUPO): 2009 Sep - current
4. American Society for Biochemistry and Molecular Biology (ASBMB): Nov 10, 2015 – Nov 9, 2016
5. German Pathology Society (AG Molekularpathologie): May 2015 – May 2017
6. American Society for Mass Spectrometry (ASMS): May 2015 - current
7. American Association for Cancer Research (AACR): Feb 2011 – Feb 2012
8. Singapore Society for Mass Spectrometry (SSMS): Sep 2011 – 2012

Co-organizer for meetings/symposium/workshops

1. 2020. 12.04. 2nd Westlake Symposium for Clinical Mass Spectrometry (co-chair).
2. 2020.12.05-06. Westlake Workshop for Clinical Mass Spectrometry (organiser).
3. 2019.12.03-05. Zhejiang University PhD Clinical Research Symposium.
4. 2019.08.18. 2nd Proteomic Big Data Symposium. (organisers)

5. 2019.07.20-21. Ray Wu Youth Forum 2019 (co-chair).
6. 2019.07.19. Westlake University Ray Wu Youth Symposium (co-chair).
7. 2019.06.30. 1st Westlake International Workshop for Proteomic Big Data (chair)
8. 2019.06.28-29. Proteomic big data Course. (organisor)
9. 2018.11.11. Westlake University-Fudan University IBSSymposium. Proteomic BIG data and Tumor Stratification (co-chair)
10. 2018.06.30. Ray Wu Youth Forum (co-chair)

Teaching

1. 2021. Fudan Unviersity. Recent progresses in clinical proteomics. MD program.
2. 2021. Group Problems Solving. PhD students in Westlake University.
3. 2021. Biostatistics and Bioinformatics. PhD students in Westlake University.
4. 2020. Introductory biology. Proteomics. Westlake University.
5. 2020. Fundamental concepts and principles of biology. Westlake University.
6. 2020. Problem solving. PhD students in Westlake University.
7. 2020. Biostatistics and Bioinformatics. PhD students in Westlake University.
8. 2019. Proteomics. PhD students in Westlake University
9. 2019.10.20. Zhejiang Proteomics Sample preparation Course. 2019. Hangzhou.
10. 2019.05.29. Luming 31st Proteomics Course.
11. 2019.05.11. Policy-makers' Cutting-edge Technology Course.
12. 2018.9.20. Luming proteomics Course
13. 2018.6.11. Hangzhou High School. Proteomics: how far is it away from our daily life?
14. 2018.5.19. Tsinghua Times Intelligence.
15. 2013.11.22. Swiss institute of bioinformatics. Course "Data sharing in proteomics: databases, repositories, standards, data submission". PCT-SWATH: fast digitization of entire proteome and implications.
16. 2012. Proteomics course. ETH Zurich.
17. 2011. Teaching assistant for course "BS832 Proteomics Mini Project" (Dr Newman Sze) offered to undergraduate students in School of Biological Sciences, Nanyang Technological University.
18. 2010. Tutor for course "BS414 From Systems Biology to Synthetic Biology" (Dr Newman Sze) offered to Year 4 undergraduate students and graduate students in School of Biological Sciences, Nanyang Technological University. Giving tutorials on topics including Gene Ontology, Systems Biology Markup Language, and Cytoscape.
19. 2010. Teaching assistant for course "BS832 Proteomics Mini Project" (Dr Newman Sze) offered to undergraduate students in School of Biological Sciences, Nanyang Technological University.
20. 2010. Lecturer for graduate course "BL5216 Advanced Genetics & Genome Sciences" (Dr Xu Jian) offered to graduate students in National University of Singapore. Lecture title: Proteomics approaches, bioinformatics, and biostatistics. 2nd March 2010.
21. 2009. Teaching assistant for course "Introductory Biology" (Course code: BS101, Prof Alex Law) offered to undergraduate students in School of Biological Sciences, Nanyang Technological University.