# ZHU Zhongxu 朱忠旭

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## Education

2019-Now

**PhD**, Biomedical Sciences, [City University of Hong Kong](https://www.cityu.edu.hk)

Supervisor: Prof. WANG Xin [(https://xinwlab.netlify.app/)](https://xinwlab.netlify.app/)

2021/07-2021/12

**Visiting Scholar**, Global Scholars Program, [City of Hope National Medical Center](https://www.cityofhope.org/homepage)

Supervisor: Chair and Prof., Ajay GOEL [(https://www.cityofhope.org/ajay-goel)](https://www.cityofhope.org/ajay-goel)

2012/08-2015/06

**MSc**, Bioinformatics, [Zhejiang University](https://www.zju.edu.cn/english/)

Supervisor: Prof. CHEN Xin [(https://person.zju.edu.cn/xchen)](https://person.zju.edu.cn/xchen)

2008/09-2012/06

**BSc**, Biotechnology, [Shandong Agriculture University](http://english.sdau.edu.cn/)

Minor: **BEng**, Computer Science and Technology

## Employment

2016/11-Now

Hangzhou Biomedical Biotechnology Co., LTD

2019/03-Now **Consultant** for bioinformatics affair in CAP Certificated laboratory

2016/11-2019/02 **Director** of the Departhment of Bioinformatics

2015/09-2016/10

Hangzhou Silicon Gene Biotechnology Co., LTD

Senior Bioinformatics **Engineer**

2015/07-2015/08

National Supercomputing Center, Tianjin

**Engineer** (Internship)

## Publications

† co-first author, \* corresponding author

* Kota Nakamura†, **Zhongxu Zhu†**, Souvick Roy†, Eunsung Jun, Haiyong Han, Ruben M. Munoz, Satoshi Nishiwada, Geeta Sharma, Derek Cridebring, Frederic Zenhausern, Seungchan Kim, Denise J. Roe, Sourat Darabi, In Woong Han, Douglas Evans, Suguru Yamada, Michael J. Demeure, Carlos Becerra, Scott A. Celinski, Erkut Borazanci, Susan Tsai, Yasuhiro Kodera, Joon Oh Park, John Bolton, Xin Wang\*, Song Cheol Kim\*, Daniel Von Hoff\*, Ajay Goel\*. An exosome-based transcriptomic signature for noninvasive, early detection of patients with pancreatic ductal adenocarcinoma: A multicenter cohort study. ***Gastroenterology*** (2022). [link](https://doi.org/10.1053/j.gastro.2022.06.090)
* Jinsei Miyoshi†, **Zhongxu Zhu†**, Aiping Luo†, Shusuke Toden, Xuantong Zhou, Daisuke Izumi, Mitsuro Kanda, Tetsuji Takayama, Iqbal Parker, Minjie Wang, Feng Gao, Ali Zaidi, Hideo Baba, Yasuhiro Kodera, Yongping Cui, Xin Wang\*, Zhihua Liu\*, and Ajay Goel\*. A microRNA-based liquid biopsy signature for the early detection of esophageal squamous cell carcinoma: a retrospective, prospective and multicenter study. ***Mol Cancer*** 21, 44 (2022). [link](https://doi.org/10.1186/s12943-022-01507-x)
* Souvick Roy, Mitsuro Kanda, Sachiyo Nomura, **Zhongxu Zhu**, Yuji Toiyama, Akinobu Taketomi, James Goldenring, Hideo Baba, Yasuhiro Kodera, and Ajay Goel\*. Diagnostic efficacy of circular RNAs as noninvasive, liquid biopsy biomarkers for early detection of gastric cancer. ***Mol Cancer*** 21, 42 (2022). [link](https://doi.org/10.1186/s12943-022-01527-7)
* In-Seob Lee, **Zhongxu Zhu**, Jeeyun Lee, Joon Oh Park, Xiwei Wu, Tiffany Ong, Sierra Min Li, Xin Wang, Joseph Chao\*, and Ajay Goel\*. “A liquid biopsy signature predicts treatment response to fluoropyrimidine plus platinum therapy in patients with metastatic or unresectable gastric cancer: implications for precision oncology.” ***Mol Cancer*** 21, no. 1 (2022): 1-5. [link](https://doi.org/10.1186/s12943-021-01483-8)
* Yuma Wada, Mitsuo Shimada, Yuji Morine, Tetsuya Ikemoto, Yu Saito, **Zhongxu Zhu**, Xin Wang et al. “Circulating miRNA Signature Predicts Response to Preoperative Chemoradiotherapy in Locally Advanced Rectal Cancer.” ***JCO Precision Oncology*** 5 (2021): 1788-1801. [link](https://doi.org/10.1200/PO.21.00015)
* [Letter] Yuma Wada, **Zhongxu Zhu**, and Ajay Goel\*. “Re: Noninvasive identification of lymph node metastasis in T1 colorectal cancer by transcriptomic panel based on liquid biopsy assay: additional analytical strategies are needed (GASTRO-D-21-01671).” ***Gastroenterology*** (2021): S0016-5085. [link](https://doi.org/10.1053/j.gastro.2021.09.013)
* Daisuke Izumi†, **Zhongxu Zhu†**, Yuetong Chen†, Shusuke Toden, Xinying Huo, Mitsuro Kanda, Takatsugu Ishimoto et al. “Assessment of the Diagnostic Efficiency of a Liquid Biopsy Assay for Early Detection of Gastric Cancer.” ***JAMA network open*** 4, no. 8 (2021): e2121129-e2121129. [link](https://doi.org/10.1001/jamanetworkopen.2021.21129)
* **Zhongxu Zhu**, Keqin Gregg, and Wenli Zhou\*. “iRGvalid: A Robust in silico Method for Optimal Reference Gene Validation.” ***Frontiers in Genetics*** (2021): 1460. [link](https://doi.org/10.3389/fgene.2021.716653)
* Yu Chen†, Tan Wu†, **Zhongxu Zhu†**, Hao Huang, Liang Zhang, Ajay Goel, Mengsu Yang, and Xin Wang\*. “An integrated workflow for biomarker development using microRNAs in extracellular vesicles for cancer precision medicine.” In ***Seminars in Cancer Biology*** . Academic Press, 2021. [link](https://doi.org/10.1016/j.semcancer.2021.03.011)
* Shilu Chen†, **Zhongxu Zhu†**, Xia Yang, Lili Liu, Yang-fan He, Ming-ming Yang, Xin-yuan Guan, Xin Wang\*, and Jing-ping Yun\*. “Cleavage and polyadenylation specific factor 1 promotes tumor progression via alternative polyadenylation and splicing in hepatocellular carcinoma.” ***Frontiers in cell and developmental biology*** 9 (2021): 340. [link](https://doi.org/10.3389/fcell.2021.616835)
* [Book chapter] **Zhongxu Zhu†**, Guiyuan Han†, Hao Huang†, Lingli He, Yu Chen, Jia Ke, Feng Gao, Louis Vermeulen, and Xin Wang\*. “Genome-wide Discovery of MicroRNA Biomarkers for Cancer Precision Medicine.” (2020): 1-34. [link](https://doi.org/10.1039/9781788019958-00001)
* Han Hu†, Weitao Wang†, **Zhongxu Zhu†**, Jianhua Zhu, Deyong Tan, Zhipeng Zhou, Chuanzao Mao\*, and Xin Chen\*. “GIPS: A software guide to sequencing-based direct gene cloning in forward genetics studies.” ***Plant physiology*** 170, no. 4 (2016): 1929-1934. [link](http://dx.doi.org/10.1104/pp.15.01327)
* **Zhongxu Zhu**, and Xin Chen\*. “Single cell sequencing technology and its applications progress.” ***Genomics and Applied Biology*** (2015): 05. [link](http://dx.doi.org/10.13417/j.gab.034.000902)

## Conference Proceedings

* [Poster] **Zhongxu Zhu**, and Xin Chen, Gene Identification Via Phenotype Sequencing: a Tool That Guides Sequencing Based Forward Genetics Studies, International Plant and Animal Genome Conference XXII 2014, San Diego, Jan. 2014
* [Abstract] Katsuki Miyazaki, Zhongxu Zhu, Yuji Morine, Takeo Toshima, Yuji Toiyama, Yasuhiro Kodera, Xin Wang, Tomoharu Yoshizumi, Mitsuo Shimada, and Ajay Goel. “An exosomal miRNA-based liquid biopsy assay for the noninvasive diagnostic marker of intrahepatic cholangiocarcinoma” [DDW 2022]
* [Abstract] Nakamura Kota, Souvick Roy, **Zhongxu Zhu**, Eunsung Jun, Haiyong Han, Ruben M. Munoz, Satoshi Nishiwada et al. “An exosomal miRNA-based liquid biopsy signature for the noninvasive early detection of pancreatic ductal adenocarcinoma.” Cancer Research 82, no. 12\_Supplement (2022): 3389-3389. [AACR link](https://aacrjournals.org/cancerres/article/82/12_Supplement/3389/700151)
* [Abstract] Nakamura Kota, **Zhongxu Zhu**, Satoshi Nishiwada, In Woong Han, Joon Oh Park, Yasuhiro Kodera, Xin Wang, Masayuki Sho, and Ajay Goel. “Mo1227: A NOVEL MICRORNA SIGNATURE FOR PREDICTING SURVIVAL OUTCOMES IN PATIENTS WITH RESECTABLE PANCREATIC CANCER.” Gastroenterology 162, no. 7 (2022): S-734.

## Patents

* 发明专利201810591504.3一种基于目标区域测序的单个外显子拷贝数变异预测方法（发明人：朱忠旭;周文莉;杨克勤;吕远栋）
* 发明专利201810468822.0一种伴随实验生成样本ID的方法（发明人：朱忠旭;周文莉;杨克勤;牛成镇）
* 实用新型201721438010.9一种快速降压的高压灭菌锅（发明人：吕远栋;牛成镇;朱忠旭）
* 发明专利201510890563.7基于概率框架和重测序技术快速发现表型相关基因的方法（发明人：陈新;朱忠旭;王纬韬）

## Teaching

2021/01-2021/05

Teaching Assistant, Introduction to Biostatistics and Data Analysis

2020/09-2020/12

Teaching Assistant, Genomics and Bioinformatics

2020/01-2020/05

Teaching Assistant, Introduction to Biostatistics and Data Analysis

2019/09-2019/12

Teaching Assistant, Calculus for Life Science

## Professional Services

**Reviewer**

* Frontiers in Molecular Biosciences

## Prizes

* BMS Postgraduate Research Output Award (2022)
* Outstanding Academic Performance Award (2021)
* 公司优秀员工 (2018)
* 校优秀毕业生 (2012)，校优秀学生干部 (2011)