# Guangchuang Yu

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## Education

2013-2017 (expected)

**PhD**; The University of Hong Kong; *Evolution Study of Influenza A Virus*

2006-2009

**MSc**; Anhui Medical University; *Biochemistry and Molecular Biology*

2001-2005

**BSc**; South China Agricultural University; *Biotechnology*

2015

Institut Pasteur, Paris; *Train the Trainers 2015*

## Professional Experience

2015

**INDA Steering Committee**; International Network for Data Analysis, Institut Pasteur

2009-2013

**Bioinformatician**; College of Life Science and Technology, Jinan University

2007-2009

**Visiting Student**; Beijing Institute of Radiation Medicine

## Software Development

* [ChIPseeker](https://github.com/GuangchuangYu/ChIPseeker): ChIP peak Annotation, Comparison and Visualization
* [clusterProfiler](https://github.com/GuangchuangYu/clusterProfiler): Comparing biological themes among gene clusters
* [DOSE](https://github.com/GuangchuangYu/DOSE): Disease Ontology Semantic and Enrichment analysis
* [ggtree](https://github.com/GuangchuangYu/ggtree): Phylogenetic tree viewer for different types of tree annotations
* [GOSemSim](https://github.com/GuangchuangYu/GOSemSim): GO-terms and gene samantic similarity measures
* [ReactomePA](https://github.com/GuangchuangYu/ReactomePA): Reactome pathway analysis

## Awards

* 2013-2017, Postgraduate Studentships (for PhD students at The University of Hong Kong)
* 2012, Best paper of the year 2010, Journal of Integrated OMICS.

## Grants

* 2013 (completed), PI, Investigate functions of hnRNPK in regulating cytokinesis of human lung cancer cell, Fundamental Research Funds for the Central Universities (21613414), ￥100,000
* 2011 (completed), PI, Dynamic proteomic analysis of HeLa cell cycle, Fundamental Research Funds for the Central Universities (21611303), ￥20,000

## Publications

Citation = 435, H-index = 10, I10-index = 11

(data from [Google Scholar](https://scholar.google.com/citations?user=DO5oG40AAAAJ&hl=en), Jan 2016)

1. **G Yu**, DK Smith, H Zhu, Y Guan, TTY Lam\*. ggtree: an R package for visualization and annotation of phylogenetic tree with different types of meta-data. ***Methods in Ecology and Evolution***. Submitted.
2. **G Yu**, QY He\*. [ReactomePA: an R/Bioconductor package for reactome pathway analysis and visualization](http://pubs.rsc.org/en/Content/ArticleLanding/2016/MB/C5MB00663E). ***Molecular BioSystems***. 2016, Accepted.
3. **G Yu**\*, LG Wang, QY He\*. [ChIPseeker: an R/Bioconductor package for ChIP peak annotation, comparision and visualization](http://bioinformatics.oxfordjournals.org/cgi/content/abstract/btv145). ***Bioinformatics***. 2015, 31(14):2382-2383.
4. **G Yu**\*, LG Wang, GR Yan, QY He\*. [DOSE: an R/Bioconductor package for Disease Ontology Semantic and Enrichment analysis](http://bioinformatics.oxfordjournals.org/cgi/content/abstract/btu684). ***Bioinformatics***. 2015, 31(4):608-609.
5. X Sun†, **G Yu**†, Q Xu, N Li, C Xiao, X Yin, K Cao, J Han, QY He\*. [Putative cobalt- and nickel-binding proteins and motifs in *Streptococcus pneumonia*](http://pubs.rsc.org/en/content/articlelanding/2013/mt/c3mt00126a). ***Metallomics***. 2013, 5(7):928-935.
6. YY Zhu†, **G Yu**†, Y Zhang, Z Xu, YQ Huang, GR Yan\*, QY He\*. [A novel andrographolide derivative AL-1 exerts its cytotoxicity on K562 cells through a ROS-dependent mechanism](http://onlinelibrary.wiley.com/doi/10.1002/pmic.201200273/abstract). ***Proteomics***, 2013, 13(1):169-178.
7. **G Yu**†, LG Wang†, XH Meng, QY He\*. [LXtoo: an integrated live Linux distribution for the bioinformatics community](http://www.biomedcentral.com/1756-0500/5/360/). ***BMC Research Notes***. 2012, 5(1):360.
8. **G Yu**, LG Wang, Y Han, QY He\*. [clusterProfiler: an R package for comparing biological themes among gene clusters](http://online.liebertpub.com/doi/abs/10.1089/omi.2011.0118). ***OMICS: A Journal of Integrative Biology***. 2012, 16(5):284-287.
9. **G Yu**, QY He\*. [Functional similarity analysis of human virus-encoded miRNAs](http://www.jclinbioinformatics.com/content/1/1/15/abstract). ***Journal of Clinical Bioinformatics***. 2011, 1(1):15.
10. **G Yu**†, CL Xiao†, X Bo, CH Lu, Y Qin, S Zhan, QY He\*. [A new method for measuring functional similarity of microRNAs](http://www.jiomics.com/index.php/jio/article/view/21). ***Journal of Integrated OMICS***. 2011, 1(1):49-54.
11. **G Yu**†, CL Xiao†, CH Lu†, HT Jia, F Ge, W Wang, XF Yin, HL Jia, JX He\*, QY He\*. [Phosphoproteome profile of human lung cancer cell line A549](http://pubs.rsc.org/en/Content/ArticleLanding/2011/MB/C0MB00055H). ***Molecular BioSystems***. 2011, 7(2):472-479.
12. **G Yu**†, F Li†, Y Qin, X Bo\*, Y Wu, S Wang\*. [GOSemSim: an R package for measuring semantic similarity among GO terms and gene products](http://bioinformatics.oxfordjournals.org/cgi/content/abstract/26/7/976). ***Bioinformatics***. 2010, 26(7):976-978.
13. XY Yang, K He, G Du, X Wu, **G Yu**, Y Pan, G Zhang, X Sun, QY He. Integrated Translatomics with Proteomics to Identify Novel Iron–Transporting Proteins in *Streptococcus pneumoniae*. ***Frontiers Microbiology***. 2016, Accepted
14. PY Huang, CCD Lee, CH Yip, CL Cheung, **G Yu**, TTY Lam, DK Smith, H Zhu\*, Y Guan\*. [Genetic characterization of highly pathogenic H5 influenza viruses from poultry in Taiwan, 2015](http://www.sciencedirect.com/science/article/pii/S1567134815300721). ***Infection, Genetics and Evolution***. 2016, 38:96-100.
15. SH Xu, JZ Huang, ML Xu, **G Yu**, XF Yin, D Chen\*, GR Yan\*. [ACK1 Promotes Gastric Cancer Epithelial-Mesenchymal Transition and Metastasis through AKT-POU2F1-ECD Signaling](http://onlinelibrary.wiley.com/doi/10.1002/path.4515/abstract). ***The Journal of Pathology***. 2015, 236(2):175-185.
16. Z Guo, J Han, XY Yang, K Cao, K He, G Du, G Zeng, L Zhang, **G Yu**, Z Sun, QY He\*, X Sun\*. [Proteomic analysis on the copper resistance of *Streptococcus pneumonia*](http://pubs.rsc.org/en/content/articlelanding/2015/mt/C4MT00276H). ***Metallomics***. 2015, 7(3):448-454.
17. XY Yang, L Zhang, J Liu, N Li, **G Yu**, K Cao, J Han, G Zeng, Y Pan, X Sun\*, QY He\*. [Proteomic analysis on the antibacterial activity of a Ru(II) complex against *Strepococcus pneumonia*](http://www.sciencedirect.com/science/article/pii/S1874391914005521). ***Journal of Proteomics***. 2015, 115:107-116.
18. N Wang†, J Zhang†, L Zhang, XY Yang, N Li, **G Yu**, J Han, K Cao, Z Guo, X Sun\*, QY He\*. [Proteomic analysis of putative heme-binding proteins in *Streptococcus pyogenes*](http://pubs.rsc.org/en/content/articlelanding/2014/mt/c4mt00027g). ***Metallomics***. 2014, 6(8):1451-1459.
19. H Sun\*, J Weng, **G Yu**, RH Massawe. [A DNA-Based Semantic Fusion Model for Remote Sensing Data](http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0077090). ***PLoS One***. 2013, 8(10):e77090.
20. GR Yan†, Z Tan†, Y Wang, ML Xu, **G Yu**, Y Li\*, QY He\*. [Quantitative Proteomics Characterization on the Anti-tumor Effects of Isodexyelephantopin against Nasopharyngeal Carcinoma](http://onlinelibrary.wiley.com/doi/10.1002/pmic.201300152/abstract). ***Proteomics***. 2013, 13(21):3222-3232.
21. J Li, X Lu, Q Wu, **G Yu**, Z Xu, L Qiu, Z Pei, Y Lin, J Pang\*. [Design, SAR, angiogenic activities evaluation and pro-angiogenic mechanism of new marine cyclopeptide analogs](http://www.eurekaselect.com/107734/article). ***Current Medicinal Chemistry***. 2013, 20(9):1183-1194.
22. Y Han, **G Yu**, H Sarioglu, A Caballero-Martinez, F Schlott, M Ueffing, H Haase, C Peschel, AM Krackhardt\*. [Proteomic investigation of the interactome of FMNL1 in hematopoietic cells unveils a role in calcium-dependent membrane plasticity](http://www.sciencedirect.com/science/article/pii/S1874391912007567). ***Journal of Proteomics***. 2013, 78:72-82.
23. Y Ma†, J Yang†, X Fan†, H Zhao, W Hu, Z Li, **G Yu**, X Ding, J Wang, X Bo, X Zheng, Z Zhou\*, S Wang\*. [Cellular MicroRNA let-7c Inhibits M1 Protein Expression of the H1N1 Influenza A Virus in Infected Human Lung Epithelial Cells](http://onlinelibrary.wiley.com/doi/10.1111/j.1582-4934.2012.01572.x/abstract). ***Journal of Cellular and Molecular Medicine***. 2012, 16(10):2539-2546.
24. GR Yan†, FY Zhou†, BL Dang, Y Zhang, **G Yu**, X Liu, QY He\*. [Genistein-induced mitotic arrest of gastric cancer cells by downregulating KIF20A, a proteomics study](http://onlinelibrary.wiley.com/doi/10.1002/pmic.201100652/abstract). ***Proteomics***. 2012, 12(14):2391-2399.
25. X Sun†, XY Yang†, XF Yin, **G Yu**, CL Xiao, X He, QY He\*. [Proteomic Analysis of Membrane Proteins from *Streptococcus pneumoniae* with Multiple Separation Methods plus High Accuracy Mass Spectrometry](http://www.liebertonline.com/doi/abs/10.1089/omi.2010.0133). ***OMICS: A Journal of Integrative Biology***. 2011, 15(10):683-694.

## Book Chapters

* **G Yu**, “Bioinformatics II”, in “Functional Protein Research”, 385-425, Qing-Yu He (Eds), ***Science Press***, 2012. (China’s Twelfth Five-Year National Important Books Project, in Chinese)