GUANGCHUANG YU

Professor of Bioinformatics at Southern Medical University. I have developed more than 20 R packages, including clusterProfiler, ChIPseeker, treeio and ggtree.

I am broadly interested in bioinformatics, metagenomics, molecular evolution, data integration and visualization.



EDUCATION

南方医科大学高层次人才"不忘初心 牢记使命"学习教育

延安干部培训学院

Yan'an, CN

2017

2018

PhD.. Bioinformaitcs

The University of Hong Kong

Hong Kong, CN

2013

· Thesis: Big-data computational methods for studying molecular evolution: from accurate genome assembly to phylogenetic analysis and data integration

2015

Train the Trainers

Institut Pasteur

Paris, FR

2009 2006

M.S., Biochemistry and Molecular Biology

Anhui Medical University

PHefei, CN

·Thesis: miRNA靶基因计算分析新方法及其应用研究

2005 2001

2015

B.S., Biotechnology

Southern Medical University

Q Guangzhou, CN



E CERTIFICATE

Certificate of Teaching and Learning in Higher Education

Centre for Enhancement of Teaching and Learning

The University of Hong Kong



RESEARCH EXPERIENCE

2026

2018

2017

Professor

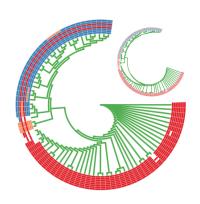
Southern Medical University School of Basic Medical Sciences

· Associate director of Institute of Bioinformatics

Post-doctoral Fellow 2018

State Key Laboratory of Infectious Diseases

♦ The University of Hong Kong



CONTACT

- guangchuangyu@gmail.com
- y guangchuangyu
- github.com/GuangchuangYu
- guangchuangyu.github.io
- **%** biobabble
- **J** (86) 13826432521

SKILLS

Highly experienced in

- · ggplot2

Experience with

- · Linux
- · Bash
- · C++
- ·JAVA





PUBLICATIONS

2018

Two methods for mapping and visualizing associated data on phylogeny using ggtree

Molecular Biology and Evolution. 2018, 35(12):3041-3043.

- · G Yu*, TTY Lam, H Zhu, Y Guan*
- · Impact Factor = 14.797

2018

Using meshes for MeSH term enrichment and semantic analyses Bioinformatics. 2018, 34(21):3766-3767.

· G Yu

2017

ggtree: an R package for visualization and annotation of phylogenetic trees with their covariates and other associated data

Methods in Ecology and Evolution. 2017, 8(1):28-36

- · G Yu, DK Smith, H Zhu, Y Guan, TTY Lam*
- · ₹ ESI Highly Cited Paper

2016

ReactomePA: an R/Bioconductor package for reactome pathway analysis and visualization

Molecular BioSystems. 2016, 12(2):477-479

- · G Yu, QY He*
- · ₹ ESI Highly Cited Paper

2016

Integrated Translatomics with Proteomics to Identify Novel Iron-Transporting Proteins in Streptococcus pneumoniae

Frontiers in Microbiology. 2016, 7:78

· XY Yang, K He, G Du, X Wu, G Yu, Y Pan, G Zhang*, X Sun*, QY He*

2016

Genetic characterization of highly pathogenic H₅ influenza viruses from poultry in Taiwan, 2015

Infection, Genetics and Evolution. 2016, 38:96-100

· PY Huang, CCD Lee, CH Yip, CL Cheung, G Yu, TTY Lam, DK Smith, H Zhu*, Y Guan*

2015

ChIPseeker: an R/Bioconductor package for ChIP peak annotation, comparision and visualization

Bioinformatics. 2015, 31(14):2382-2383

- · G Yu*, LG Wang, QY He*
- · ₹ ESI Highly Cited Paper

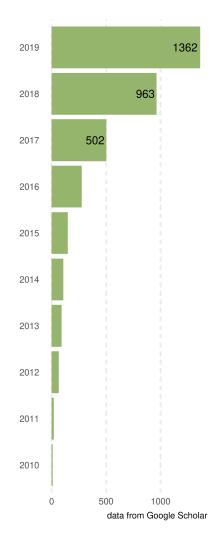
2015

DOSE: an R/Bioconductor package for Disease Ontology Semantic and **Enrichment analysis**

Bioinformatics. 2015, 31(4):608-609

· G Yu*, LG Wang, GR Yan, QY He*

- · Citation = 3598
- · H-index = 16
- \cdot I10-index = 22



2015	ACK1 Promotes Gastric Cancer Epithelial-Mesenchymal Transition and
2013	Metastasis through AKT-POU2F1-ECD Signaling
	Journal of Pathology. 2015, 236(2):175-185
	· SH Xu, JZ Huang, ML Xu, G Yu , XF Yin, D Chen [*] , GR Yan [*]
2015	Proteomic analysis on the copper resistance of <i>Streptococcus</i> pneumonia
	Metallomics . 2015, 7(3):448-454
	· Z Guo, J Han, XY Yang, K Cao, K He, G Du, G Zeng, L Zhang, G Yu , Z Sun, QY He [*] , X Sun [*]
2015	Proteomic analysis on the antibacterial activity of a Ru(II) complex against <i>Strepococcus pneumonia</i>
	Journal of Proteomics. 2015, 115:107-116
	· XY Yang, L Zhang, J Liu, N Li, G Yu , K Cao, J Han, G Zeng, Y Pan, X Sun [*] , QY He [*]
2014	Proteomic analysis of putative heme-binding proteins in <i>Streptococcus pyogenes</i>
	Metallomics . 2014, 6(8):1451-1459
	· N Wang*, J Zhang*, L Zhang, XY Yang, N Li, G Yu , J Han, K Cao, Z Guo, X Sun*, QY He*
2013	Putative cobalt- and nickel-binding proteins and motifs in Streptococcus pneumonia
	<i>Metallomics</i> . 2013, 5(7):928-935
	· X Sun#, G Yu #, Q Xu, N Li, C Xiao, X Yin, K Cao, J Han, QY He [*]
2013	A novel andrographolide derivative AL-1 exerts its cytotoxicity on K562 cells through a ROS-dependent mechanism
	<i>Proteomics</i> , 2013, 13(1):169-178
	· YY Zhu#, G Yu #, Y Zhang, Z Xu, YQ Huang, GR Yan*, QY He*
2013	A DNA-Based Semantic Fusion Model for Remote Sensing Data
	PLoS One . 2013, 8(10):e77090
	· H Sun [*] , J Weng, G Yu , RH Massawe
2013	Quantitative Proteomics Characterization on the Anti-tumor Effects of Isodexyelephantopin against Nasopharyngeal Carcinoma
	Proteomics . 2013, 13(21):3222-3232
	· GR Yan [#] , Z Tan [#] , Y Wang, ML Xu, G Yu , Y Li [*] , QY He [*]
2013	Design, SAR, angiogenic activities evaluation and pro-angiogenic mechanism of new marine cyclopeptide analogs
	Current Medicinal Chemistry. 2013, 20(9):1183-1194
	· J Li, X Lu, Q Wu, G Yu , Z Xu, L Qiu, Z Pei, Y Lin, J Pang*

2013	Proteomic investigation of the interactome of FMNL1 in hematopoietic cells unveils a role in calcium-dependent membrane plasticity
	Journal of Proteomics . 2013, 78:72-82
	 Y Han, G Yu, H Sarioglu, A Caballero-Martinez, F Schlott, M Ueffing, H Haase, C Peschel, AM Krackhardt
2012	LXtoo: an integrated live Linux distribution for the bioinformatics community
	BMC Research Notes. 2012, 5(1):360
	· G Yu [#] , LG Wang [#] , XH Meng, QY He [*]
2012	clusterProfiler: an R package for comparing biological themes among gene clusters
	OMICS: A Journal of Integrative Biology. 2012, 16(5):284-287
	 • G Yu, LG Wang, Y Han, QY He[*] •
2012	Cellular MicroRNA let-7c Inhibits M1 Protein Expression of the H1N1 Influenza A Virus in Infected Human Lung Epithelial Cells
	Journal of Cellular and Molecular Medicine. 2012, 16(10):2539-2546
	· 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 [*]
2012	Genistein-induced mitotic arrest of gastric cancer cells by downregulating KIF20A, a proteomics study
	Proteomics . 2012, 12(14):2391-2399
	· GR Yan [#] , FY Zhou [#] , BL Dang, Y Zhang, G Yu , X Liu, QY He [*]
2011	Functional similarity analysis of human virus-encoded miRNAs
	Journal of Clinical Bioinformatics. 2011, 1(1):15
	· G Yu , QY He [*]
2011	A new method for measuring functional similarity of microRNAs
2011	Journal of Integrated OMICS. 2011, 1(1):49-54
	• G Yu [#] , CL Xiao [#] , X Bo, CH Lu, Y Qin, S Zhan, QY He [*]
2011	Phosphoproteome profile of human lung cancer cell line A549
	Molecular BioSystems . 2011, 7(2):472-479
	• G Yu [#] , CL Xiao [#] , CH Lu [#] , HT Jia, F Ge, W Wang, XF Yin, HL Jia, JX He [*] , QY He [*]
2011	Proteomic Analysis of Membrane Proteins from <i>Streptococcus</i> pneumoniae with Multiple Separation Methods plus High Accuracy Mass Spectrometry
	OMICS: A Journal of Integrative Biology. 2011, 15(10):683-694
	· X Sun [#] , XY Yang [#] , XF Yin, G Yu , CL Xiao, X He, QY He [*]

GOSemSim: an R package for measuring semantic similarity among GO 2010 terms and gene products Bioinformatics. 2010, 26(7):976-978 · G Yu[#], F Li[#], Y Qin, X Bo^{*}, Y Wu, S Wang^{*} · TESI Highly Cited Paper 结合基因组分析预测炎症相关miRNA及其靶标 2009 军事医学科学院院刊. 2009, 33(3):245-247 ·余光创,王超,许尹,伯晓晨,王升启*,秦宜德* 依赖于5'端非编码区高级结构的真核生物mRNA翻译调控 2007 **中国生物化学与分子生物学报**. 2007, 23(11):881-887 · 余光创,秦宜德,伯晓晨,王升启* **CONFERENCE PROCEEDINGS** Two methods for mapping and visualizing associated data on phylogeny 2019 using ggtree **♀** Guangzhou, CN 第一届南方医科大学基础医学学术年会 Data integration and visualization of phylogenetic trees 2018 The 3rd South Lake Innovation Forum for International Young Talents **♀** Wuhan, CN ggtree for tree visualization & annotation 2017 Ohicago, US Phylogenetic tree visualization workshop/hackathon Computational Methods in Ecology and Evolution 2017 The Second International Workshop on Environmental Microbiomes **♀** Guangzhou, CN ggtree for visualization and annotation of phylogenetic trees 2016 Paeijing, CN The 9th China-R Conference