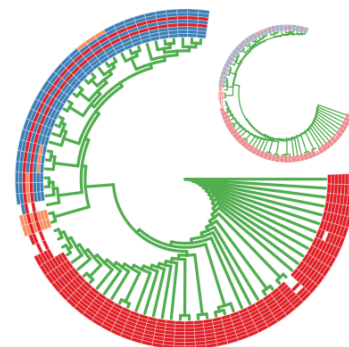


# GUANGCHUANG YU

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

- 2018  
|  
2013
- 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
- PhD., Bioinformatics**  
The University of Hong Kong  
Hong Kong, CN
- 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  
Hefei, CN
- Thesis: miRNA靶基因计算分析新方法及其应用研究
- 2005  
|  
2001
- B.S., Biotechnology**  
Southern Medical University  
Guangzhou, CN

## CERTIFICATE

- 2015
- Certificate of Teaching and Learning in Higher Education**  
Centre for Enhancement of Teaching and Learning  
The University of Hong Kong

## RESEARCH EXPERIENCE

- 2026  
|  
2018
- Professor**  
School of Basic Medical Sciences  
Southern Medical University
- Associate director of Institute of Bioinformatics
- 2018  
|  
2017
- Post-doctoral Fellow**  
State Key Laboratory of Infectious Diseases  
The University of Hong Kong

## CONTACT

-  [guangchuangyu@gmail.com](mailto:guangchuangyu@gmail.com)
-  [guangchuangyu](#)
-  [github.com/GuangchuangYu](https://github.com/GuangchuangYu)
-  [guangchuangyu.github.io](https://guangchuangyu.github.io)
-  [biobabble](#)
-  (86) 13826432521

## SKILLS

Highly experienced in

- R
- ggplot2

Experience with

- Linux
- Bash
- C++
- JAVA

*Last updated on 2019-09-29.*

2013  
|  
2009

## Bioinformatician

Key Laboratory of Functional Protein Research of Guangdong Higher Education Institutes

📍 Jinan University



## TEACHING EXPERIENCE

2019

### BMB209: Workshops in Applied Bioinformatics

Department of Biochemistry and Molecular Biology

📍 University of Southern Denmark

• PhD level class, invited lecture

2019

### 生物信息学科研训练

School of Basic Medical Sciences

📍 Southern Medical University

• Undergraduate level class

2019

### 基因组学

School of Basic Medical Sciences

📍 Southern Medical University

• Undergraduate level class

2019

### 基础医学新进展讲座

School of Basic Medical Sciences

📍 Southern Medical University

• Undergraduate level class

2012  
|  
2011

### 功能蛋白质研究

College of Life Science and Technology

📍 Jinan University

• Graduate level class



## GRANTS

2020  
|  
2018

### 南方医科大学第三层次人才引进科研项目 (G618289088)

PI, CNY ¥1,500,000

2013

### hnRNPK蛋白在调控人肺癌细胞周期胞质分裂中的作用研究 (21613414)

PI, CNY ¥100,000, 中央高校基本科研业务费专项资金

2011

### Hela细胞周期动态蛋白质组学分析 (21611303)

PI, CNY ¥20,000, 中央高校基本科研业务费专项资金



## BOOKS

2012

### 生物信息学II

《功能蛋白质研究》. 385-425. 何庆瑜 (主编), 科学出版社 (“十二五”国家重点图书出版规划项目)

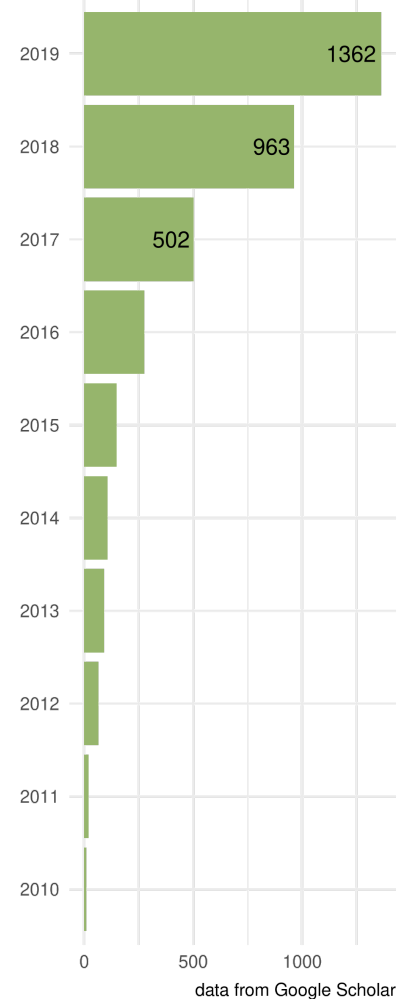
· 余光创



## 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

• Citation = 3598  
 • H-index = 16  
 • I10-index = 22



- 2015 [DOSE: an R/Bioconductor package for Disease Ontology Semantic and Enrichment analysis](#)  
*Bioinformatics*. 2015, 31(4):608-609  
• **G Yu**<sup>\*</sup>, LG Wang, GR Yan, QY He<sup>\*</sup>
- 2015 [ACK1 Promotes Gastric Cancer Epithelial-Mesenchymal Transition and 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<sup>\*</sup>, GR Yan<sup>\*</sup>
- 2015 [Proteomic analysis on the copper resistance of \*Streptococcus 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<sup>\*</sup>, X Sun<sup>\*</sup>
- 2015 [Proteomic analysis on the antibacterial activity of a Ru\(II\) complex against \*Streptococcus pneumonia\*](#)  
*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<sup>\*</sup>, QY He<sup>\*</sup>
- 2014 [Proteomic analysis of putative heme-binding proteins in \*Streptococcus pyogenes\*](#)  
*Metallomics*. 2014, 6(8):1451-1459  
• N Wang<sup>#</sup>, J Zhang<sup>#</sup>, L Zhang, XY Yang, N Li, **G Yu**, J Han, K Cao, Z Guo, X Sun<sup>\*</sup>, QY He<sup>\*</sup>
- 2013 [Putative cobalt- and nickel-binding proteins and motifs in \*Streptococcus pneumonia\*](#)  
*Metallomics*. 2013, 5(7):928-935  
• X Sun<sup>#</sup>, **G Yu**<sup>#</sup>, Q Xu, N Li, C Xiao, X Yin, K Cao, J Han, QY He<sup>\*</sup>
- 2013 [A novel andrographolide derivative AL-1 exerts its cytotoxicity on K562 cells through a ROS-dependent mechanism](#)  
*Proteomics*. 2013, 13(1):169-178  
• YY Zhu<sup>#</sup>, **G Yu**<sup>#</sup>, Y Zhang, Z Xu, YQ Huang, GR Yan<sup>\*</sup>, QY He<sup>\*</sup>
- 2013 [A DNA-Based Semantic Fusion Model for Remote Sensing Data](#)  
*PLoS One*. 2013, 8(10):e77090  
• H Sun<sup>\*</sup>, J Weng, **G Yu**, RH Massawe

- 2013 [Quantitative Proteomics Characterization on the Anti-tumor Effects of Isodexylephantopin against Nasopharyngeal Carcinoma](#)  
*Proteomics*. 2013, 13(21):3222-3232  
• GR Yan<sup>#</sup>, Z Tan<sup>#</sup>, Y Wang, ML Xu, **G Yu**, Y Li<sup>\*</sup>, QY He<sup>\*</sup>
- 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<sup>\*</sup>
- 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<sup>\*</sup>
- 2012 [LXtoo: an integrated live Linux distribution for the bioinformatics community](#)  
*BMC Research Notes*. 2012, 5(1):360  
• **G Yu**<sup>#</sup>, LG Wang<sup>#</sup>, XH Meng, QY He<sup>\*</sup>
- 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<sup>\*</sup>  
• 🏆 ESI Highly Cited Paper
- 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<sup>#</sup>, J Yang<sup>#</sup>, X Fan<sup>#</sup>, H Zhao, W Hu, Z Li, **G Yu**, X Ding, J Wang, X Bo, X Zheng, Z Zhou<sup>\*</sup>, S Wang<sup>\*</sup>
- 2012 [Genistein-induced mitotic arrest of gastric cancer cells by downregulating KIF20A, a proteomics study](#)  
*Proteomics*. 2012, 12(14):2391-2399  
• GR Yan<sup>#</sup>, FY Zhou<sup>#</sup>, BL Dang, Y Zhang, **G Yu**, X Liu, QY He<sup>\*</sup>
- 2011 [Functional similarity analysis of human virus-encoded miRNAs](#)  
*Journal of Clinical Bioinformatics*. 2011, 1(1):15  
• **G Yu**, QY He<sup>\*</sup>

- 2011 [A new method for measuring functional similarity of microRNAs](#)  
*Journal of Integrated OMICS*. 2011, 1(1):49-54  
 · G Yu<sup>#</sup>, CL Xiao<sup>#</sup>, X Bo, CH Lu, Y Qin, S Zhan, QY He<sup>\*</sup>
- 2011 [Phosphoproteome profile of human lung cancer cell line A549](#)  
*Molecular BioSystems*. 2011, 7(2):472-479  
 · G Yu<sup>#</sup>, CL Xiao<sup>#</sup>, CH Lu<sup>#</sup>, HT Jia, F Ge, W Wang, XF Yin, HL Jia, JX He<sup>\*</sup>, QY He<sup>\*</sup>
- 2011 [Proteomic Analysis of Membrane Proteins from \*Streptococcus pneumoniae\* with Multiple Separation Methods plus High Accuracy Mass Spectrometry](#)  
*OMICS: A Journal of Integrative Biology*. 2011, 15(10):683-694  
 · X Sun<sup>#</sup>, XY Yang<sup>#</sup>, XF Yin, G Yu, CL Xiao, X He, QY He<sup>\*</sup>
- 2010 [GOSemSim: an R package for measuring semantic similarity among GO terms and gene products](#)  
*Bioinformatics*. 2010, 26(7):976-978  
 · G Yu<sup>#</sup>, F Li<sup>#</sup>, Y Qin, X Bo<sup>\*</sup>, Y Wu, S Wang<sup>\*</sup>  
 · 🏆 ESI Highly Cited Paper
- 2009 [结合基因组分析预测炎症相关miRNA及其靶标](#)  
*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<sup>\*</sup>, 秦宜德<sup>\*</sup>
- 2007 [依赖于5'端非编码区高级结构的真核生物mRNA翻译调控](#)  
*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<sup>\*</sup>

## CONFERENCE PROCEEDINGS

- 2019 [Two methods for mapping and visualizing associated data on phylogeny using ggtree](#)  
 第一届南方医科大学基础医学学术年会  Guangzhou, CN
- 2018 [Data integration and visualization of phylogenetic trees](#)  
 The 3<sup>rd</sup> South Lake Innovation Forum for International Young Talents  
 Wuhan, CN
- 2017 [ggtree for tree visualization & annotation](#)  
 Phylogenetic tree visualization workshop/hackathon  Chicago, US
- 2017 [Computational Methods in Ecology and Evolution](#)  
 The Second International Workshop on Environmental Microbiomes  
 Guangzhou, CN

2016

**ggtree for visualization and annotation of phylogenetic trees**

The 9<sup>th</sup> China-R Conference

📍 Beijing, CN