# 余光创

教授

广州白云区沙太南路南方医科大学生命科学楼 10 楼

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## 🎓 教育背景

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|---|---|---|---|
| 香港大学 | 生物信息学 | 博士 | 2017 |
| 安徽医科大学 | 生物化学与分子生物学 | 硕士 | 2009 |
| 华南农业大学 | 生物技术 | 学士 | 2005 |
| Institut Pasteur, Paris | Train the Trainers | | 2015 |

## 📕 证书

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

## 🏛 工作经历

香港大学，公共卫生学院，新发传染性疾病国家重点实验室

　　　博士后                                                                                        2017

暨南大学，生命科学学院，功能蛋白质研究中心

　　　生物信息技术员                                                                        2009–2013

## 👥 教学

Student Helper, The University of Hong Kong                                              2013–2014

　　　BIOL6001 Presentation Skills and Research Seminars in Biological Sciences

Lecturer, Jinan University                                                                        2011–2012

　　　Functional Proteomics

## 🏆 奖励

**2013–2017** *Postgraduate Studentships.* The University of Hong Kong.

**2012** *Best paper of the year 2010.* Journal of Integrated OMICS.
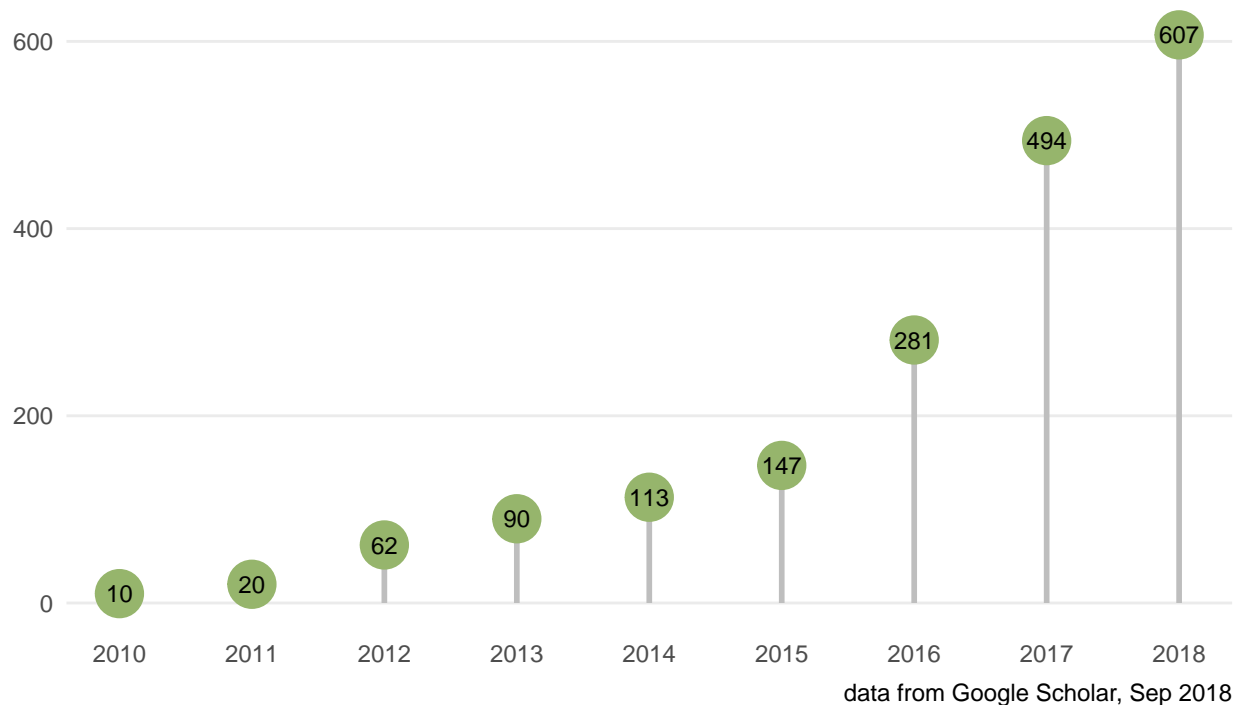
## 🗄 基金

**2013** (完成) *PI*, hnRNPK 蛋白在调控人肺癌细胞周期胞质分裂中的作用研究, 中央高校基本科研业务费专项资金 (21613414), CNY 100,000

**2011** (完成) *PI*, Hela 细胞周期动态蛋白质组学分析, 中央高校基本科研业务费专项资金 (21611303), CNY 20,000

# 📑 PUBLICATIONS

*Journal Articles*

Citation = 1854, H–index = 14, I10–index = 19



data from Google Scholar, Sep 2018

🔥 ESI Hot Paper (X1)

🏆 ESI Highly Cited Paper (X4)

第一作者/通讯作者 SCI 文章 10 篇: 1 区 (X5)，2 区 (X1)

\# indicates equal contribution, \* indicates corresponding

1. **G Yu**. clusterProfiler: universal enrichment tool for functional and comparative study. ***bioRxiv***. 2018, https://doi.org/10.1101/256784
2. **G Yu**. Using meshes for MeSH term enrichment and semantic analyses. ***Bioinformatics***. accepted. Impact Factor: 5.481
3. **G Yu**, DK Smith, H Zhu, Y Guan, TTY Lam[\*]. 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. 🔥 🏆 Citation: 153, Impact Factor: 6.363
4. **G Yu**, QY He[\*]. ReactomePA: an R/Bioconductor package for reactome pathway analysis and visualization. ***Molecular BioSystems***. 2016, 12(2):477-479. 🏆 Citation: 95, Impact Factor: 2.759
5. **G Yu**[\*], LG Wang, QY He[\*]. ChIPseeker: an R/Bioconductor package for ChIP peak annotation, comparision and visualization. ***Bioinformatics***. 2015, 31(14):2382-2383. 🏆 Citation: 147, Impact Factor: 5.481
6. **G Yu**[\*], LG Wang, GR Yan, QY He[\*]. DOSE: an R/Bioconductor package for Disease Ontology Semantic and Enrichment analysis. ***Bioinformatics***. 2015, 31(4):608-609. Citation: 88, Impact Factor: 5.481
7. 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*. ***Metallomics***. 2013, 5(7):928-935. Citation: 19, Impact Factor: 4.069
8. 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. ***Proteomics***, 2013,

13(1):169-178. Citation: 23, Impact Factor: 3.532

9. **G Yu**[#], LG Wang[#], XH Meng, QY He[*]. LXtoo: an integrated live Linux distribution for the bioinformatics community. ***BMC Research Notes***. 2012, 5(1):360. Citation: 6

10. **G Yu**, LG Wang, Y Han, QY He[*]. clusterProfiler: an R package for comparing biological themes among gene clusters. ***OMICS: A Journal of Integrative Biology***. 2012, 16(5):284-287. 🏆 Citation: 643, Impact Factor: 2.370

11. **G Yu**, QY He[*]. Functional similarity analysis of human virus-encoded miRNAs. ***Journal of Clinical Bioinformatics***. 2011, 1(1):15. Citation: 14

12. **G Yu**[#], CL Xiao[#], X Bo, CH Lu, Y Qin, S Zhan, QY He[*]. A new method for measuring functional similarity of microRNAs. ***Journal of Integrated OMICS***. 2011, 1(1):49-54. Citation: 20

13. **G Yu**[#], CL Xiao[#], CH Lu[#], HT Jia, F Ge, W Wang, XF Yin, HL Jia, JX He[*], QY He[*]. Phospho-proteome profile of human lung cancer cell line A549. ***Molecular BioSystems***. 2011, 7(2):472-479. Citation: 14, Impact Factor: 2.759

14. **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. ***Bioinformatics***. 2010, 26(7):976-978. Citation: 378, Impact Factor: 5.481

15. 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 in Microbiology***. 2016, 7:78. Citation: 12, Impact Factor: 4.019

16. 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. ***Infection, Genetics and Evolution***. 2016, 38:96-100. Citation: 7, Impact Factor: 2.545

17. 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. ***Journal of Pathology***. 2015, 236(2):175-185. Citation: 27, Impact Factor: 6.253

18. 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*. ***Metallomics***. 2015, 7(3):448-454. Citation: 11, Impact Factor: 4.069

19. 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*. ***Journal of Proteomics***. 2015, 115:107-116. Citation: 8, Impact Factor: 3.722

20. 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*. ***Metallomics***. 2014, 6(8):1451-1459. Citation: 0, Impact Factor: 4.069

21. H Sun[*], J Weng, **G Yu**, RH Massawe. A DNA-Based Semantic Fusion Model for Remote Sensing Data. ***PLoS One***. 2013, 8(10):e77090. Citation: 6, Impact Factor: 2.766

22. 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. ***Proteomics***. 2013, 13(21):3222-3232. Citation: 14, Impact Factor: 3.532

23. 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. ***Current Medicinal Chemistry***. 2013, 20(9):1183-1194. Citation: 1, Impact Factor: 3.469

24. 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. ***Journal of Proteomics***. 2013, 78:72-82. Citation: 7, Impact Factor: 3.722

25. 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. ***Journal of Cellular and Molecular Medicine***. 2012, 16(10):2539-2546. Citation: 54, Impact Factor: 4.302

26. 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. ***Proteomics***. 2012, 12(14):2391-2399. Citation: 48, Impact Factor: 3.532

27. 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. ***OMICS: A Journal of Integrative Biology***. 2011, 15(10):683-694. Citation: 15, Impact Factor: 2.370

### *E-Letters*

1. Y Wan[†], **G Yu**[†], J Zou[†], W Liu[†], Q Liu[*], Why animals have escaped the Indian Ocean tsunami? ***Science***. 2017, http://science.sciencemag.org/content/356/6340/841/tab-e-letters
2. M Tang, S Weng, **G Yu**, K Yang, M Pan, S He, Q Liu[*], RE: Sequence features of the virulence protein VP24 of Ebola virus. ***Science***. 2017, http://science.sciencemag.org/content/351/6279/1339/tab-e-letters

### *Books*

- **余光创**, "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**, 2012. ("十二五" 国家重点图书出版规划项目)

## 👥 CONFERENCE PROCEEDINGS

### *Presentations*

1. **ggtree for tree visualization & annotation** (invited), Phylogenetic tree visualization workshop/hackathon, The Field Museum of Natural History, Chicago, May. 2017
2. **Computational Methods in Ecology and Evolution**, The Second International Workshop on Environmental Microbiomes, Sun Yat-sen University, Guangzhou, April. 2017
3. **ggtree for visualization and annotation of phylogenetic trees** (invited), The 9th China-R Conference, Renmin University of China, Beijing, May. 2016

### *Posters*

1. **ggtree: a programming package for complex data integration and analysis in phylogeny to identify potential genetic markers of influenza a virus that determine interspecies transmission**, Scientific Advisory Board (SAB) Meeting for the Theme-based Research Scheme on Viral, Host and Environmental Determinants of Influenza Virus Transmission and Pathogenesis, The University of Hong Kong, Hong Kong, Jun. 2017
2. **Phylogeny-guided genome assembly method for short read nucleotide sequences from co-infecting influenza A viruses**, Options IX for the control of influenza, International Society for Influenza and other Respiratory Virus Disease, Chicago, Aug. 2016
3. **ggtree: an *R* package for visualization and annotation of phylogenetic tree with different types of meta-data**, The 20th Research Postgraduate Symposium, The University of Hong Kong, Hong Kong, Dec. 2015

## 🎥 PUBLIC MEDIA

- "Plotting trees + data" lecture by Guangchuang Yu. https://youtu.be/tqspAXM0UQE

## 🏠 PROFESSIONAL AFFILIATIONS

- **Member**, International Society for influenza and other Respiratory Virus Disease — 2016
- **Steering Committee**, International Network for Data Analysis, Institut Pasteur — 2015
- **Visiting student**, Beijing Institute of Radiation Medicine — 2005-2009

## 👤 PROFESSIONAL SERVICES

### *Associate Editor*

- *Journal of Integrated OMICS*, 2011-present

### *Reviewer*

*Bioinformatics, BMC Bioinformatics, Computational Biology and Chemistry, Current Bioinformatics, Gastroenterology Research and Practice, Molecular BioSystems, R Journal*

## ⚙ SOFTWARE DEVELOPMENT

**R ranking**: ranked 49/72256 worldwide by Git Awards

- badger: Badge for R Package
- dlstats: Download Stats of R Packages
- emojifont: Emoji and Font Awesome in Graphics
- ggplotify: Convert Plot to 'grob' or 'ggplot' Object
- ggimage: Use Image in 'ggplot2'
- meme: Create Meme
- rvcheck: R/Package Version Check
- scatterpie: Scatter Pie Plot
- shadowtext: Shadow Text Grob and Layer
- ChIPseeker: ChIPseeker for ChIP peak Annotation, Comparison, and Visualization
- clusterProfiler: statistical analysis and visualization of functional profiles for genes and gene clusters
- DOSE: Disease Ontology Semantic and Enrichment analysis
- ggtree: an R package for visualization and annotation of phylogenetic trees with their covariates and other associated data
- GOSemSim: GO-terms Semantic Similarity Measures
- meshes: MeSH Enrichment and Semantic analyses
- ReactomePA: Reactome Pathway Analysis
- seqcombo: Visualization Tool for Sequence Recombination and Reassortment
- tidytree: A Tidy Tool for Phylogenetic Tree Data Manipulation
- TIPars: Taxa Insertion by Parsimony
- treeio: Base Classes and Functions for Phylogenetic Tree Input and Output

### *Contributions to open source libraries*

- basicTrendline: Add Trendline and Confidence Interval of Basic Regression Models to Plot
- cowsay: Messages, Warnings, Strings with Ascii Animals
- kableExtra: Construct Complex Table with 'kable' and Pipe Syntax
- microbiomeViz: Visualizing Microbiome Data
- MSnbase: Base Functions and Classes for Mass Spectrometry and Proteomics
- pheatmap: Pretty Heatmaps
- scholar: Analyse Citation Data from Google Scholar