

# Curriculum Vitae

**Name:** YU Hao

## **Present Appointment:**

Associate Professor and Deputy Head  
(Major Appointment)  
Department of Biological Sciences  
Faculty of Science  
National University of Singapore  
Singapore 117543  
<http://www.dbs.nus.edu.sg/staff/yuhao.htm>

Senior Principal Investigator  
(Joint Appointment)  
Plant Functional Genomics Group  
Temasek Life Sciences Laboratory  
Singapore 117604  
<http://www.tll.org.sg/yuhao.asp>

## **Academic/Professional Qualifications:**

2009-present, Deputy Head, Department of Biological Sciences, NUS  
2008-present, Associate Professor (tenured), Department of Biological Sciences, NUS  
2004-2008, Assistant Professor, Department of Biological Sciences, NUS  
2009-present, Senior Principal Investigator, Temasek Life Sciences Laboratory, Singapore  
2004-2009, Principal Investigator, Temasek Life Sciences Laboratory, Singapore  
2002-2003, Post-Doctoral Fellow, California Institute of Technology, USA  
1997-2001, Ph.D., National University of Singapore (NUS), Singapore  
1994-1997, M.Eng., Shanghai Jiaotong University, P.R.China  
1990-1994, B.Eng., Shanghai Jiaotong University, P.R.China

## **Recent Awards:**

2009: Faculty Teaching Excellence Award  
2007: Singapore Youth Award for Science and Technology  
2007: NUS Young Research Award 2007  
2006: National Young Scientist Award (Singapore National Academy of Science-A\*STAR)  
2003: National Institutes of Health Postdoctoral Fellowship, California Institute of Technology  
2002&2003: National University of Singapore Overseas Fellowship  
2001: Gold medal of International Society of Plant Molecular Biology for best PhD thesis in NUS

## **Research Interests:**

Plant functional genomics; Flowering time control; Flower development; Phytohormones in plant reproductive development

## **Selected Publications:**

### ***International refereed journals:***

1. Wang Y, Liu C, Yang D, Yu H,<sup>\*</sup> Liou Y-C<sup>\*</sup> (2009) Pin1At encoding a peptidyl-prolyl cis/trans isomerase regulates flowering time in Arabidopsis. **Molecular Cell** (In press) (**co-corresponding author**).
2. Liu C, Thong Z, Yu H (2009) Coming into bloom: The specification of floral meristems. **Development** 136: 3379-3391.
3. Liu C, Xi W, Shen L, Tan C, Yu H (2009) Regulation of floral patterning by flowering time genes. **Developmental Cell** 16: 711-722.
4. Li D, Liu C, Shen L, Wu Y, Chen H, Robertson M, Helliwell CA, Ito T, Meyerowitz EM, Yu H (2008) A repressor complex governs the integration of flowering signals in Arabidopsis. **Developmental Cell** 15: 110-120.
5. Hou X, Hu W-W, Shen L, Lee LYC, Tao Z, Han J-H, Yu H (2008) Global identification of DELLA target genes during Arabidopsis flower development. **Plant Physiology** 147: 1126-1142

6. Han P, García-Ponce B, Fonseca-Salazar G, Alvarez-Buylla ER, Yu H (2008) AGAMOUS-LIKE 17, a novel flowering promoter, acts in a FT-independent photoperiod pathway. **Plant Journal** 55: 253-265.
7. Liu C, Chen H, Er HL, Soo HM, Kumar P, Han J-H, Liou YC, Yu H (2008) Direct interaction of AGL24 and SOC1 integrates flowering signals in Arabidopsis. **Development** 135: 1481-1491.
8. Ito T, Ng KH, Lim TS, Yu H, Meyerowitz EM (2007) The homeotic protein AGAMOUS controls late stamen development by regulating a jasmonate biosynthetic gene in Arabidopsis. **Plant Cell** 19: 3516-3529.
9. Gan Y, Yu H, Peng J, Broun P (2007) Genetic and molecular regulation by DELLA proteins of trichome development in Arabidopsis thaliana. **Plant Physiology** 145: 1031-1042.
10. Liu C, Zhou J, Bracha-Drori K, Yalovsky S, Ito T, Yu H (2007) Specification of Arabidopsis floral meristem identity by repressing flowering time genes. **Development** 134: 1901-1910.
11. Gan Y, Liu C, Yu H, Broun P (2007) Integration of cytokinin and gibberellin signalling by Arabidopsis transcription factors GIS, ZFP8 and GIS2 in the regulation of epidermal cell fate. **Development** 134: 2073-2081.
12. Lim TS, Chitra TR, Han P, Pua EC, Yu H (2006) Cloning and molecular characterization of Arabidopsis and *Brassica juncea* flavin-containing amine oxidases. **J. Exp. Bot.** 57: 4155-4169.
13. Gan Y, Kuminoto R, Liu C, Ratcliffe O, Yu H, Broun P (2006) *GLABROUS INFLORESCENCE STEMS* modulates gibberellin signaling in the regulation of epidermal differentiation and shoot maturation in *Arabidopsis*. **Plant Cell** 18: 1383-1395.
14. Xu Y, Teo LL, Zhou J, Kumar P, Yu H (2006) Floral organ identity genes in the *Dendrobium* orchids. **Plant Journal** 46: 54-68.
15. Zhao Y, Medrano L, Ohashi K, Fletcher JC, Yu H, Sakai H, Meyerowitz EM (2004) HANABA TARANU is a GATA transcription factor that regulates shoot apical meristem and flower development in Arabidopsis. **Plant Cell** 16:2586-2600.
16. Yu H, Ito T, Zhao Y, Peng J, Kumar P, Meyerowitz EM (2004) Floral homeotic genes are targets of gibberellin signaling in flower development. **Proc. Natl. Acad. Sci. USA** 101: 7827-7832.
17. Ito T, Wellmer F, Yu H, Das P, Ito N, Alves-Ferreira M, Riechmann JL, Meyerowitz EM (2004) The Arabidopsis organ identity protein AGAMOUS controls microsporogenesis through regulation of SPOROCTELESS/NOZZLE. **Nature** 430: 356-360.
18. Yu H, Ito T, Wellmer F, Meyerowitz EM (2004) Repression of AGAMOUS-LIKE 24 is a crucial step in promoting flower development. **Nature Genetics** 36: 157-161.
19. Yang SH, Yu H, Goh CJ (2003) Functional characterisation of a cytokinin oxidase gene DSKO1 in *Dendrobium* orchid. **Plant Mol. Biol.** 51: 237-248.
20. Yu H, Xu Y, Tan EL, Kumar P (2002) AGAMOUS-LIKE 24, a dosage-dependent mediator of the flowering signals. **Proc. Natl. Acad. Sci. USA** 99: 16336-16341.
21. Yu H, Yang SH, Goh CJ (2002) Spatial and temporal expression of the orchid floral homeotic gene DOMADS1 is mediated by its upstream regulatory elements. **Plant Mol. Biol.** 49: 225-237.
22. Yang SH, Yu H, Goh CJ (2002) Isolation and characterization of the orchid cytokinin oxidase DSKO1 promoter. **J. Exp. Bot.** 53: 1899-1907.
23. Yu H, Goh CJ (2001) Molecular genetics of reproductive biology in orchids. **Plant Physiology** 127: 1390-1393. (Review)
24. Yu H, Yang SH, Goh CJ (2000) DOH1, a class 1 knox gene, is required for maintenance of the basic plant architecture and floral transition in orchid. **Plant Cell** 12: 2143-2159
25. Yu H, Goh CJ (2000) Identification and characterization of three orchid MADS-box genes of the AP1/AGL9 subfamily during floral transition. **Plant Physiol.** 123: 1325-1336.

**Book Chapters:**

1. Yu H, Xu Y (2007) Orchids. In: Pua EC and Davey MR (eds.) Biotechnology in Agriculture and Forestry, Vol 61. Springer-Verlag, Berlin Heidelberg, Germany, pp 273-288.
2. Yu H, Dhavale T, Yang S (2006) Molecular mechanisms of hormone functions in flowering. In: Teixeira da Silva JA. (ed.) Floriculture, Ornamental and Plant Biotechnology: Advances and Topical Issues, Ed 1 Vol 1. Global Science Books, London, UK, pp 25-32.

**Service for Academic Society:**

**Grant reviewer:**

- National Science Foundation, USA
- Austrian Science Fund, Austria
- Czech Science Foundation (GACR), Czech Republic
- Agency for Science, Technology and Research's (A\*STAR) Biomedical Research Council (BMRC), Singapore
- Hong Kong-Research Grant Council, Hong Kong

***Ad hoc* Reviewer for international refereed journals:**

- Science
- Nature Genetics
- Developmental Cell
- Plant Cell
- Proc. Natl. Acad. Sci., USA
- Seminars in Cell and Developmental Biology
- PLoS Genetics
- PLoS One
- Plant Physiology
- Plant Molecular biology
- Advances in Botanical Research
- Journal of Plant Physiology
- Plant Cell Reports
- Journal of the American Society of Horticultural Science
- Plant Science
- Plant Breeding
- Plant Physiology and Biochemistry
- TSW Development & Embryology
- Floriculture and Ornamental Biotechnology (GSB journals)
- Science Asia- Journal of the Science Society of Thailand

**Scientific Advisory Board or Editor:**

- Journal of Experimental Botany (SAB member)
- BMC Plant Biology (Associate Editor)
- GM crops (Editor)
- Global Science Books™ (Editor)