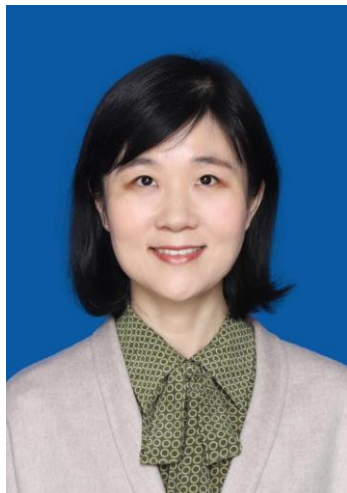


GU Tingting



Areas of Research

Chromatin structure, dedifferentiation and de novo organogenesis, hormonal and epigenetic regulation of the development and ripening of strawberry.

Contact Information

Office location: Room C603 Science Building (

Mailing address: 1 Weigang, Xuanwu District, Nanjing, Jiangsu Province, 210095

Office phone: 025-84399550

Email address: gutingting@njau.edu.cn

Research Interests

1. Annotating the epigenome of strawberry based on histone modifications, DNA methylation and small RNAs.
2. Uncovering the roles of histone modifications and DNA methylation in strawberry development and ripening.
3. Promoting de novo shoot organogenesis in conventional plant genetic engineering for the application of gene editing in horticultural crops.

Education Background

Bachelor: Nanjing University

Master: Nanjing University, advised by Prof. Dacheng Tian

Doctor: Nanjing University, advised by Prof. Dacheng Tian

Work experience

Postdoc, Washington University, advised by Sarah C R Elgin, 2009-2014

Associate Professor, Nanjing Agricultural University 2014-

Honors and Awards

Zhongshan promising academic scholar, 2015

Selected Publication

- Huang X, Pan Q, Lin Y, Gu T[#], Li Y[#] (2020) A native chromatin immunoprecipitation (ChIP) protocol for studying histone modifications in strawberry fruits. *Plant Methods* 16
- Jiang Z, Wang T, Sun Y, Nong Y, Tang L, Gu T[#], Wang S, Li Z[#] (2020) Application of Pb(II) to probe the physiological responses of fungal intracellular vesicles. *Ecotoxicol Environ Saf* 194: 110441
- Gu T[#], Jia S, Huang X, Wang L, Fu W, Huo G, Gan L, Ding J, Li Y[#] (2019) Transcriptome and hormone analyses provide insights into hormonal regulation in strawberry ripening. *Planta* 250: 145-162
- Liu D, Huang X, Lin Y, Wang X, Yan Z, Wang Q, Ding J, Gu T[#], Li Y[#] (2019) Identification of reference genes for transcript normalization in various tissue types and seedlings subjected to different abiotic stresses of woodland strawberry *Fragaria vesca*. *Scientia Horticulturae* 259
- Li W, Katin-Grazzini L, Gu X, Wang X, El-Tanbouly R, Yer H, Thammina C, Inguagiato J, Guillard K, McAvoy RJ, Wegrzyn J, Gu T[#], Li Y[#] (2017) Transcriptome Analysis Reveals Differential Gene Expression and a Possible Role of Gibberellins in a Shade-Tolerant Mutant of Perennial Ryegrass. *Front Plant Sci* 8: 868
- Gu T[#], Ren S, Wang Y, Han Y, Li Y[#] (2016) Characterization of DNA methyltransferase and demethylase genes in *Fragaria vesca*. *Mol Genet Genomics* 291: 1333-1345
- Gu T[#], Han Y, Huang R, McAvoy RJ, Li Y[#] (2016) Identification and characterization of histone lysine methylation modifiers in *Fragaria vesca*. *Sci Rep* 6: 23581
- Huang R, Ding Q, Xiang Y, Gu T[#], Li Y[#] (2016) Comparative Analysis of DNA Methyltransferase Gene Family in Fungi: A Focus on Basidiomycota. *Front Plant Sci* 7: 1556
- Guo C, Du J, Wang L, Yang S, Mauricio R, Tian D[#], Gu T[#] (2016) Insertions/Deletions-Associated Nucleotide Polymorphism in *Arabidopsis thaliana*. *Front Plant Sci* 7: 1792
- Ho JW, Jung YL, Liu T, Alver BH, Lee S, Ikegami K, Sohn KA, Minoda A, Tolstorukov MY, Appert A, Parker SC, Gu T, ... Karpen GH, Park PJ (2014) Comparative analysis of metazoan chromatin organization. *Nature* 512: 449-452
- Gu T, Elgin SC (2013) Maternal depletion of Piwi, a component of the RNAi system, impacts heterochromatin formation in *Drosophila*. *PLoS Genet* 9: e1003780
- Riddle NC^{*}, Jung YL^{*}, Gu T^{*}, Alekseyenko AA, Asker D, Gui H, Kharchenko PV, Minoda A, Plachetka A, Schwartz YB, Tolstorukov MY, Kuroda MI, Pirrotta V, Karpen GH, Park PJ, Elgin SC (2012) Enrichment of HP1a on *Drosophila* chromosome 4 genes creates an alternate chromatin structure critical for regulation in this heterochromatic

domain. PLoS Genet 8: e1002954

Kharchenko PV, Alekseyenko AA, Schwartz YB, Minoda A, Riddle NC, Ernst J, Sabo PJ, Larschan E, Gorchakov AA, Gu T, ... Elgin SC, Kuroda MI, Pirrotta V, Karpen GH, Park PJ (2011) Comprehensive analysis of the chromatin landscape in *Drosophila melanogaster*. *Nature* 471: 480-485

Gu T, Tan S, Gou X, Araki H, Tian D (2010) Avoidance of long mononucleotide repeats in codon pair usage. *Genetics* 186: 1077-1084

Yang S*, Gu T*, Pan C, Feng Z, Ding J, Hang Y, Chen JQ, Tian D (2008) Genetic variation of NBS-LRR class resistance genes in rice lines. *Theor Appl Genet* 116: 165-177

Du J*, Gu T*, Tian H, Araki H, Yang YH, Tian D (2008) Grouped nucleotide polymorphism: a major contributor to genetic variation in *Arabidopsis*. *Gene* 426: 1-6
