CURRICULUM VITAE

KENGO MOROHASHI, Ph.D.

PRESENT ADDRESS
Department of Biochemistry and Molecular Biology
Michigan State University
603 Wilson Rd, East Lansing, MI 48824
Phone: +1-614-407-6676
E-mail: morohas1@msu.edu

ACADEMIC APPOINTMENTS

2020 – present	Visiting Researcher, Michigan State University, MI, USA.
2020 – present	Visiting Associate Professor, Tokyo University of Science, Chiba, Japan.
2015 – 2020	Associate Professor, Tokyo University of Science, Chiba, Japan.

POSTDOCTORAL TRAINING

2010 - 2015	Research Scientist, The Ohio State University, Columbus, OH.
(2014)	Post-Doctoral Researcher, RIKEN, Yokohama, Japan)
2005 - 2010	Post-Doctoral Fellow, The Ohio State University, Columbus, OH.
2003 - 2005	Post-Doctoral Researcher, Tokyo University of Science, Tokyo, Japan.
2003	Lecturer of the Venture Business Laboratory, Yokohama National University, Yokohama, Japan.
2001 - 2003	Technology Fellowship of NEDO (New Energy and Industrial Technology Development Organization), Yokohama National University, Yokohama, Japan.

EDUCATION

1996-2001	Ph.D., Bioscience, Graduate School of Biological Science, Nara Institute of Science and Technology, Nara, Japan.
1992-1996	B.Sc., Biological Science, Department of Applied Biological Science, Chemistry, Faculty of Science and Technology, Tokyo University of Science.

PEER REVIEWED PUBLICATIONS

1. Ishihara, H., Sugimoto, K., Tarr, P.T., Temman, H., Kadokura, S., Inui, Y., Sakamoto, T., Sasaki, T., Aida, M., Suzuki, T., Inagaki, S., **Morohashi, K.**, Seki, M., Kakutani, T., Meyerowitz, E.M., Matsunaga, S. (2019). Primed histone demethylation regulates shoot regenerative competency. ***Nat Commun***. 10:1786.

2. Arai, H., Yanagiura, K., Toyama, Y., **Morohashi, K*.** (2019). Genome-wide analysis of *MpBHLH12*, a IIIf basic helix-loop-helix transcription factor of *Marchantia polymorpha.* ***J Plant Res.*** 132:197-209. (* corresponding author)

3. **Morohashi, K*.,** Russinova, E. (2019). Towards a next step of the research of regulatory networks in plant growth and development. ***J Plant Res.*** 132:155-157. (* corresponding author)

4. Jones, M.A., **Morohashi, K.,** Grotewold, E., Harmer, S.L. (2019). Arabidopsis JMJD5/JMJ30 acts independently of LUX ARRHYTHMO within the plant circadian clock to enable temperature compensation. ***Front. Plant Sci.*** 10:57.

5. Ilias, I.A., Negishi, K., Yasue, K., Jomura, N., **Morohashi, K.,** Baharum, S.N., Goh, H.H. (2018). Transcriptome-wide effects of expansin gene manipulation in etiolated *Arabidopsis* seedling. ***J Plant Res.*** 132:159-172.

6. Shibata,M., Breuer, B., Kawamura, A., Clark N.M., Rymen, B., Braidwood, L., **Morohashi, K.,** Busch, W., Benfey, P.N., Sozzani, R., and Sugimoto, K. (2018). GTL1 and DF1 regulate root hair growth through transcriptional repression of *ROOT HAIR DEFECTIVE 6-LIKE 4* in Arabidopsis. ***Development*** 145:dev159707.

7. Siarot, L., Toyazaki, H., Hidaka, M., Kurumisawa, K., Hirakawa, T., **Morohashi, K.,** and Aono, T. (2017). A novel regulatory pathway for K+ uptake in the legume symbiont *Azorhizobium caulinodans*: *TrkJ* acts as a repressor of *kdpFABC* operon at high extracellular K+ concentration. ***Appl Environ Microbiol.*** 83(19):pii: e01197-17.

8. Matsuoka, J.-I., Ishizuna, F., Kurumisawa, K., **Morohashi, K.**, Ogawa, T., Hidaka, M., Saito, K., Ezawa, T., and Aono, T. (2017). Stringent expression control of pathogenic R-body production in legume symbiont *Azorhizobium caulinodans*. ***MBio*** 8(4):pii: e00715-17.

9. Dhillon, T., **Morohashi, K.,** Stockinger, E.J. (2017). *CBF2A–CBF4B* genomic region copy numbers alongside the circadian clock play key regulatory mechanisms driving expression of *FR-H2 CBFs*. ***Plant Mol. Biol.*** 94:333-347.

10. Iwase, A., Harashima, H., Ikeuchi, M. Rymen, B., Ohnuma, M., Komaki, S., **Morohashi, K.,** Kurata, T., Nakata, M., Ohme-Takagi, M., Grotewold, E., and Sugimoto K. (2017). WIND1 promotes shoot regeneration through transcriptional activation of *ESR1* in Arabidopsis. ***Plant Cell*** 29:54-69.

11. Yang, F., Li, W., Jiang, N., Yu, H., **Morohashi, K.,** Ouma, Z.W., Morales-Mantill, D.E., Cano, F.A.G., Mukundi, E., Prad, L.D., Velazquez, R.A., Valentin, J., Mejía-Guerra, M.K., Gary, J., Doseff, A.I., Grotewold, E. (2017). A maize gene regulatory network for phenolic metabolism. ***Mol. Plant*** 10:498-515.

12. Ikeda, K., Kamisuki, S., Uetake, S., Mizusawa, A., Ota, N., Sasaki, T., Tsukuda, S., Kusayanagi, T., Takakusagi, Y., **Morohashi, K.**, Yamori, T., Dan, S., Shiina, I., Sugawara, F. (2015). Ridaifen G, tamoxifen analog, is a potent anticancer drug working through a combinatorial association with multiple cellular factors. ***Bioorg Med. Chem.*** 23(18):6118-24.

13. Chung, D*, Barker, B.M.*, Carey, C.C.* (*co-first author), Merriman, B., Werner, E.R., Lechner, B.E., Dhingra, S., Cheng, C., Xu, W., Blosser, S.J., **Morohashi, K.,** Mazurie, A., Mitchell, T.K., Haas, H., Aaron P., Mitchell, T., and Cramer, R.A. (2014). ChIP-seq and *in vivo* transcriptome analyses of the *Aspergillus fumigatus* SREBP SrbA reveals new insights into fungal hypoxia adaptation and virulence. ***PLoS Pathogen*** 10:e1004487.

14. Zhiponova, M.K*., **Morohashi, K*.,** (*co-first author) Vanhoutte, I., Machemer-Noonan, K., Revalska, M., Van Montagu, M., Grotewold, and E., Russinova, E. (2014). HLH/bHLH transcription factor network represses cell elongation in *Arabidopsis* via an apparently incoherent feed-forward loop. ***Proc. Natl. Acad. Sci. USA*** **111**:2824-2829.

15. Eveland, A.L., Goldshmidt, A., Pautler, M., **Morohashi, K.,** Liseron-Monfils, C., Lewis, M.W., Kumari, S., Hiraga, S., Yang, F., Unger-Wallace, E., Olson, A., Hake, S., Vollbrecht, E., Grotewold, E., Ware, D*., and Jackson, D*. (2014). Regulatory modules controlling maize inflorescence architecture. ***Genome Res.*** **24**:431-43.

16. Arango, D*., **Morohashi, K*.,** (*co-first author) Yilmaz, A., Kuramochi, K., Parihar, A., Brahimaj, B., Grotewold, E., and Doseff, A.I. (2013). Molecular basis for the action of a dietary flavonoid revealed by the comprehensive identification of apigenin human targets. ***Proc. Natl. Acad. Sci. USA*** **110**:E2153-62.

17. Breuer, C., **Morohashi, K.,** Kawamura, A., Takahashi, N., Ishida, T., Umeda, M., Grotewold, E., and Sugimoto, K. (2012). Transcriptional repression of the APC/C activator CCS52A1 contributes to the active termination of cell growth. ***EMBO J.*** **31**:4488-4501.

18. Sharma, M., Chai, C., **Morohashi, K.,** Grotewold, E., Snook, M.E., and Chopra, S. (2012). Expression of flavonoid 3'-hydroxylase is controlled by P1 the regulator of 3-deoxyflavonoid biosynthesis in maize. ***BMC Plant Biology*** **12**:196.

19. **Morohashi, K.,** Casas, M.I., Falcone Ferreyra, L., Mejía-Guerra, M.K., Pourcel, L., Yilmaz, A., Feller, A., Carvalho, B., Emilianid, J., Rodriguez, E., Pellegrinet, S., McMullen, M., Casati, P., and Grotewold, E. (2012). A genome-wide regulatory framework identifies maize *Pericarp Color1* (*P1*) controlled genes. ***Plant Cell*** 24: 2745-2764.

20. Bolduc, N., Yilmaz, A., Mejia-Guerra, M.K., **Morohashi, K.,** O'Connor, D., Grotewold, E., and Hake, S. (2012). Unraveling the KNOTTED1 regulatory network in maize meristems. ***Genes & Dev.*** 26: 1685-1690. **[F1000 recommendation]**

21. Mejia-Guerra, M.K., Pomeranz, M., **Morohashi, K.,** and Grotewold, E. (2012). From plant gene regulatory grids to network dynamics. ***Biochim Biophys Acta.*** **1819**: 454-65.

22. Takami, M., Takakusagi, Y., Kuramochi, K., Tsukuda, S., Aoki, S., **Morohashi, K.,** Ohta, K., Kobayashi, S., Sakaguchi, K., and Sugawara, F. (2011). A screening of a library of

T7 phage-displayed peptide identifies E2F-4 as an etoposide-binding protein. ***Molecules***. **16**: 4278-94.

23. **Morohashi, K*.**, Sahara, H., Watashi, K*., (*co-first author) Iwabata, K., Sunoki, T., Kuramochi, K., Takakusagi, K., Miyashita, H., Sato, N., Tanabe, A., Shimotohno, K., Kobayashi, S., Sakaguchi, K., and Sugawara, F. (2011). Cyclosporin A associated helicase-like protein facilitates the association of Hepatitis C Virus RNA polymerase with its cellular cyclophilin B. ***PLoS ONE*** **6**(4): e18285.

24. Xie, Z., Lee, E. -K., Lucas, J.R., **Morohashi, K.,** Li, D., Murray, J.A.H., Sack, F.D., and Grotewold, E. (2010). Regulation of stomatal lineage cell proliferation by the *Arabidopsis* MYB FOUR LIPS via direct targeting of core cell cycle genes. ***Plant Cell*** **22**: 2306-21.

25. Ferreyra, M. L, Rius, S., Emiliani, J., Pourcel, L., Feller, A, **Morohashi, K.,** Casati, P, and Grotewold, E. (2010). Cloning and characterization of a UV-B inducible maize flavonol synthase. ***Plant J*.** **62**: 77-91.

26. **Morohashi, K.,** Xie, Z., and Grotewold, E. (2009). Gene-specific and genome-wide ChIP approaches to study plant transcriptional networks*.* ***Methods in Molecular Biology*.** In *Plant Systems Biology*. Belostotsky, D. (ed) Humana Press , NJ. 553: 3-12*.*

27. **Morohashi, K** and Grotewold, E. (2009). A Systems Approach Reveals Regulatory Circuitry for *Arabidopsis* Trichome Initiation by the GL3 and GL1 Selectors. ***PLoS Genetics*** **5**(2): e1000396.

28. Zhao, M., **Morohashi, K.,** Hatlestad, G., Grotewold, E., and Lloyd, A. (2008). The TTG1-bHLH-MYB complex controls trichome cell fate and patterning through direct targeting of regulatory loci. ***Development.*** **135**: 1991-1999.

29. Aoki, S., **Morohashi, K.,** Sunoki, T., Kuramochi, K., Kobayashi, S., and Sugawara, F. (2007). Screening of paclitaxel-binding molecules from a library of random peptides dsplayed on T7 phage particles using paclitaxel-photoimmobilized resin. ***Bioconjugate Chem.*** **18:** 1981-1986.

30. **Morohashi, K*.,** Zhao, M*., Yang, M* (co-first author)., Nguyen, B., Read, B., Lloyd, A., Lamb, R., and Grotewold, E. (2007). Participation of the *Arabidopsis* basic helix-loop-helix factor GL3 in trichome initiation regulatory events*.* ***Plant Physiol.*** **145:** 736-746.

31. Hernandez*, J. M., Feller*, A., **Morohashi, K*** (co-first author)., Frame, K., and Grotewold, E. (2007). The basic helix-loop-helix domain of maize R links transcriptional regulation and histone modifications by recruitment of an EMSY-related factor. ***Proc. Natl. Acad. Sci. USA.*** **104:** 17222-17227.

32. Asada, M., Bayarmaa, G.-A., **Morohashi, K**., and Hiratsuka, K. (2007). Expression and subcellular localization of pre-rRNA processing factor homologues in higher plants. ***Plant Biotechnol.*** **24**: 301-306.

33. Saotome, A., Kimura, S., Mori, Y., Uchiyama, Y., **Morohashi, K**., and Sakaguchi, K. (2006). Characterization of four RecQ homologues from rice (*Oryza sativa* L. cv. Nipponbare). ***Biochem. Biophys. Res. Commun***. **345**: 1283-1291.

34. **Morohashi, K***., Arai, T* (co-first author)., Saito, S., Watanabe, M., Sakaguchi, K., and Sugawara, F. (2006). A high-throughput phage display screening method using a combination of real-time PCR and affinity chromatography. ***Comb. Chem. High Throughput Screen*. 9**: 55-61.

35. Takakusagi, Y., Ohta, K., Kuramochi, K., **Morohashi, K**., Kobayashi, S., Sakaguchi, K., and Sugawara, F. (2005). Synthesis of a biotinylated camptothecin derivative and determination of the binding sequence by T7 phage display technology. ***Bioorg. Med. Chem. Let*. 15**: 4846-4849.

36. **Morohashi, K**., Yoshino, A., Yoshimori, A., Saito, S., Tanuma, S., Sakaguchi, K., and Sugawara, F. (2005). Identification of a drug target motif: an anti-tumor drug NK109 interacts with a PNxxxxP. ***Biochem. Pharm.* 70**: 37-46.

37. **Morohashi, K**., Minami, M., Takase, H., Hotta, Y., and Hiratsuka, K. (2003). Isolation and characterization of a novel GRAS gene that regulates meiosis-associated gene expression. ***J. Biol. Chem*. 278**: 20865-20873.

38. Bayarmaa, G.-A., **Morohashi, K**., Takase, H., and Hiratsuka, K. (2003). Identification of novel microsporogenesis-associated genes encoding proteins with a nuclear localization signal. ***Plant Biotechnol***. **20**: 137-143.

39. **Morohashi, K**., Takase, H., Hotta, Y., and Hiratsuka, K. (2000). Large-scale sequencing of meiosis-associated genes from a cDNA library of lily microsporocytes. ***Plant Biotechnol*. 17**: 131-135.

40. Mizushina, Y., Yagi, H., Tanaka, N., Kurosawa, T., Seto, H., Katsumi, K., Onoue, M., Ishida, H., Iseki, A., Nara, T., **Morohashi, K**., Horie, T., Onomura, Y., Narusawa, M., Aoyagi, N., Takami, K., Yamaoka, M., Inoue, Y., Matsukage, A., Yoshida, S., and Sakaguchi, K. (1996). Screening of inhibitor of eukaryotic DNA polymerases produced by microorganisms. ***J. Antibiot*.** (Tokyo). **49**: 491-492.

INVITED PUBLICATIONS, BOOK CHAPTERS AND REVIEWS

Mejia-Guerra, M.K., Pomeranz, M.C., **Morohashi, K.,** and Grotewold, E. (2012). From Plant Gene Regulatory Grids to Network Dynamics. Biochimica et Biophysica Acta. (In press).

Morohashi, K., Xie, Z., and Grotewold, E. (2009) Gene-specific and genome-wide ChIP approaches to study plant transcriptional networks. Methods in Molecular Biology. In *Plant Systems Biology*. Belostotsky, D. (ed) Humana Press , NJ. 553, 3-12.

GRANTS and FUNDING

2018 Grant-in-Aid for Scientific Research on Innovative Areas (18H04631), PI: **Morohashi, K.,** 2018-2019 (total: approx. $32,500)

2016	Grant-in-Aid for Scientific Research (KAKENHI). PI: **Morohashi, K.,** 2016-2019 (total: approx. $44,000)
2016	Japan Agency for Medical Research and Development (AMED). PI: Ohtani, N., Co-PI: **Morohashi, K.**, Co-PI: Kawada, N. 2017-2019 (total: approx. $52,000)
2015	Research Fund of Tokyo University of Science. PI**: Morohashi, K.,** Co-PI: Kuchitsu, K. 2015-2016 (total: approx. $110,000) *#Awarded seven out of approximately 800 faculty members. I was the only assocaite professor, though ohters are full professors.*
2013	Systems level analysis of Stewart's wilt disease in maize. SEEDS: The OARDC Research Enhancement Competitive Grants Program. PI: Mackey, D., Co-PI: **Morohashi, K.,** Co-PI: Wang, G.-L. (total: $100,000)
2003	Kato Memorial Bioscience Grant for International Research Fellowship

HONORS and AWARDS

2014	Outstanding Oral Presentation - ASPB Midwerstern Section Anuual Meeting
2001 - 2003	Technology Fellowship of NEDO

PRESS RELEASE

"Molecular basis for the action of a dietary flavonoid revealed by the comprehensive identification of apigenin human targets"

Arango, D*., **Morohashi, K*.,** (*co-first author) Yilmaz, A., Kuramochi, K., Parihar, A., Brahimaj, B., Grotewold, E., and Doseff, A.I. (2013). ***Proc. Natl. Acad. Sci. USA*** **110**:E2153-62.

Internal press release

The Ohio State University
http://researchnews.osu.edu/archive/apigenin.htm

Newspapers and webs

*** SciCasts**
http://scicasts.com/cancer/6011-the-compound-in-the-mediterranean-diet-that-makes-cancer-cells-mortal

*** Science Daily**
http://www.sciencedaily.com/releases/2013/05/130520154303.htm

*** Daily Telegraph – England –**
http://www.dailymail.co.uk/health/article-2328733/Camomile-tea-fights-cancer-Chemical-contained-drink-takes-away-superpowers-diseases-cells.html?ito=feeds-newsxml

**** KnoxvilleTimes.***
http://www.knoxvilletimes.com/index.php/sid/214657463/scat/2411cd3571b4f088/ht/Mediterranean-diet-component-snatches-cancer-cells-immortality-Study

*** Huffington Post UK**
https://healthsystem.osumc.edu/ccviewer/LogVisitedElement.aspx?RedirUrl=http%3a%2f%2fwww.huffingtonpost.co.uk%2f2013%2f05%2f21%2fhealth-camomile-tea-cancer-superpower_n_3316581.html&CID=820c9ea2-875e-4e54-924d-44f7c3209a03&EID=5&UIE=False&UID=87037&ED=Huffington+Post+UK

***Medical News Today**
http://www.medicalnewstoday.com/releases/260826.php

*** In *Food Product Design***
http://www.foodproductdesign.com/news/2013/05/compound-in-mediterranean-diet-inhibits-cancer-ce.aspx

*** TopNews.in**
http://www.topnews.in/health/mediterranean-diet-component-snatches-cancer-cells-immortality-study-218034

*** La Nacion newspaper Argentina**
http://www.lanacion.com.ar/1585165-en-la-dieta-mediterranea-podria-estar-la-kriptonita-del-cancer

*** India newspaper**
http://zeenews.india.com/news/health/healthy-eating/compound-in-mediterranean-diet-aids-cancer-cell-death_22053.html

*** International Business Times**
http://www.ibtimes.co.in/articles/469941/20130522/mediterranean-diet-breast-cancer-cells-nutrient.htm

*** BBC Mundo UK**
http://www.bbc.co.uk/mundo/noticias/2013/05/130522_salud_cancer_dieta_mediterranea_gtg.shtml?s

*** La Capital – Rosario Argentina**
http://www.lacapital.com.ar/informacion-gral/Hallan-el-compuesto-anticancer-en-la-dieta-mediterranea-20130525-0014.html

*** Brazil – Newspaper**
Flávia Milhorance
O GLOBO - Ciência e Saúde

TV

*** Fabio Di Todaro from Three scientific newspaper: La Stampa, Il Fatto Alimentare** (www.ilfattoalimentare.it) and Fondazione Veronesi (www.fondazioneveronesi.it).

*** Melissa Duggan**
CityNews- TV station in Toronto, Ontario. Skype interview

*** Camomile Tea Could Fight Superpower of Cancer Cells, Study Suggests**
KHOU/TV (CBS, Houston, TX)

TEACHING EXPERIENCE

"Frontiers and Techniques in Plant Science"at Cold Spring Harbor Laboratory Course. Instructor. June 28-29, 2014.

"Functional Genomics Workshop" at The Ohio State University. Instructor. June 9-20, 2014.

"Exploring gene regulatory networks using computational and experimental tools" as a tutorial session at Great Lakes Bioinformatic Conference 2011. Instructor. Athens, Ohio. May 2-4, 2011.

"ChIP and ChiP-chip Approaches to Establish Plant Regulatory Motifs" at Cold Spring Harbor Laboratory Course: MOLECULAR TECHNIQUES IN PLANT SCIENCE. Instractor. June 26 - July 16, 2009 (http://meetings.cshl.edu/courses/c-plan09.shtml)

"ChIP-chip technology" in part of Group Studies 694 in Horticulture and Crop Science (supervised by Prof. JC Jang). Co-instructor. Spring 2007. The Ohio State University.

Supervised a master thesis of a graduate student
Evans S. Kataka at the University of Nairobi, Kenya (2014)

PATENTS

Hiratsuka, K., Matsuo, N., Sinmyo, A., **Morohashi, K**. (2004/8/20) Japan 2004-241216

"CAP-INDEPENDENT RNA TRANSLATION EFFICIENCY CONTROLLER AND UTILIZATION OF THE SAME". SHINMYO, Atsuhiko, HIRATSUKA, Kazuyuki, MATSUO, Naoko, **MOROHASHI, Kengo**. Publication Number: WO/2006/019194, International Application No.: PCT/JP2005/015589. Publication Date: 23.02.2006.

Sahara, H., Mori, Y., Takahashi, N., Sato, N., Sugawara, F., Sakaguchi, K., **Morohashi, K.,** Iwabata, K., Watashi, K., Shimotohno, K., Kikuchi, K., Miyashita, H. (2007/8/24) Japan 2007-217755

Sahara, H., Mori, Y., Takahashi, N., Sato, N., Sugawara, F., Sakaguchi, K., **Morohashi, K.,** Iwabata, K., Watashi, K., Shimotohno, K., Kikuchi, K., Miyashita, H. (2010/4/10) 08828474.0-2107 PCR/JP2008065015

PRESENTATIONS

Oral - invited

Chemical biology approach highlights a critical role of a novel cyclosporin A binding protein, CSABP, in hepatitis C virus replication. 3rd Tokyo University of Science International Collaboration Workshop. Tokyo, Japan. March 15-16, 2009.

Oral

Morohashi, K., Pomeranz, M., Kovinch, N., and Grotewold, E. A mixed regulatory network involved in development and metabolic pathways in *Arabidopsis thaliana*. ASPB Midwerstern Section Annual Meeting. Columbus, Ohio. Mar 22-23, 2014.

Morohashi, K., Pomeranz, M., Smith, G., and Grotewold, E. An incoherent feed forward loop defines discrete expression patterns during early *Arabidopsis thaliana* trichome development. Plant Genomes & Biotechnology: From Genes to Networks. Cold Spring Harbor, NY. Nov 30-Dec 3, 2011.

Morohashi, K., and Yilmaz, A. Exploring gene regulatory networks using computational and experimental tools. Great Lakes Bioinformatic Conference 2011, Athens, Ohio. May 2-4, 2011.

Morohashi, K., and Grotewold, E. Genome-wide location analyses (ChIP-chip) identify transcriptional regulatory motifs in *Arabidopsis thaliana* trichome development. OCCBIO '08 Conference, Toledo, Ohio, USA. June 2-4, 2008.

Morohashi, K., Djordjevic, M., Zhao, M., Davis, M., Lloyd, A., Lamb, R. and Grotewold, E. Gene-specific and genome-wide ChIP approaches to study plant transcriptional networks in trichome development of *Arabidopsis thaliana.* PMBB Research Symposium - Clocks and Development. Columbus, Ohio, USA. Apr 11-12, 2008.

Morohashi, K., and Grotewold, E. Identification of Direct Targets for the Arabidopsis GL3 bHLH Factor. Salt Fork Workshop on Special Topics in Bioinformatics. Cambridge, Ohio, USA. Sep 20-21, 2007.

Poster

Morohashi, K., Yilmaz, A., Pourcel, L., Casas, M., Emiliani, J., Ferreyra, L., McMullen, M., Casati, P., and Grotewold, E. A combination of RNA-Seq and ChIP-Seq reveals multiple roles of P1 in pericarp development and metabolic pathways. 53rd Annual Maize Genetics Conference. St. Charles, Illinois, March 17 – March 20, 2011.

Morohashi, K., Yilmaz, A., Siegal-Gaskins, D., and Grotewold, E. An incoherent feed forward loop defines discrete expression patterns during early Arabidopsis thaliana trichome development. 21st International Conference on Arabidopsis Research. Yokohama, Japan, June 6-10, 2010.

Morohashi, K., Yilmaz, A., Siegal-Gaskins, D., and Grotewold, E. An incoherent feed forward loop defines the pattern of *AGO4* expression druing early *Arabidopsis thaliana* trichome development. Systems Biology: Global regulation of gene expression. Cold Spring Harbor Laboratory, NY, USA. March 23-27, 2010.

Morohashi, K., and Grotewold, E. A systems approach reveals regulatory circuitry for *Arabidopsis trichome* initiation by the GL3 and GL1 selectors. PLANT GENOMES: GENES, NETWORKS & APPLICATIONS, Cold Spring Harbor, New York, Mar 3-7, 2009.

Morohashi, K., and Grotewold, E. Systems approach reveals regulatory circuitry for *Arabidopsis* trichome initiation by the GL3 and GL1 selectors. The DNA-Proteome: Recent advances towards establishing the proteína-DNA interaction space. Barcelona, Spain, Apr 20-22, 2009.

Morohashi, K., and Grotewold, E. Systems approach reveals regulatory circuitry for *Arabidopsis* trichome initiation by the GL3 and GL1 selectors. The 10th Annual OPBC Annual Fall Meeting, Columbus, Ohio, USA, Nov 15, 2008.

Morohashi, K., and Grotewold, E. Genome-wide location analyses (ChIP-chip) identify transcriptional regulatory motifs in *Arabidopsis thaliana* trichome development. OCCBIO '08 Conference, Toledo, Ohio, USA. June 2-4, 2008.

Morohashi, K, Djordjevic, M., Zhao, M., Davis, M., Lloyd, A., Lamb, R., and Grotewold, E. Gene-specific and genome-wide ChIP approaches to study plant transcriptional networks in trichome development of *Arabidopsis thaliana.* Columbus, Ohio, USA. Apr 11-12, 2008.

Morohashi, K., Djordjevic, M., Zhao, M., Davis, M., Lloyd, A., Lamb, R., and Grotewold, E. Gene-specific and genome-wide ChIP approaches to study plant transcriptional networks in trichome development of *Arabidopsis thaliana.* Plant & Animal Genome XVII. San Diego, California, USA. Jan 12-16, 2008.

Davis, M., **Morohashi, K.,** Grotewold, E., and Lamb, R. Plant Infantry: *Arabidopsis thaliana* trichomes as defense organs. Botany & Plant Biology 2007 Joint Congress. Chicago, Illinois, USA. July 7-11, 2007.

Davis, M., **Morohashi, K.,** Grotewold, E., and Lamb, R. *Arabidopsis thaliana* trichomes as defense organs. 18th International Conference on Arabidopsis Research. Beijing, China. June 20-23, 2007.

Yang, M., **Morohashi, K.,** Nguyen, B., Grotewold, E., and Lamb, R. Evolution of transcription factor function: identification of target genes of paralogous gene pairs. Plant Biology 2006: Boston, Massachusetts, USA. August 5-9, 2006.

Morohashi, K., Yang, M., Nguyen, B., Zhao, M., Read, B., Lloyd, A., Lamb. R., Grotewold, E. Targets of the GLABROSU3 transcription factor during trichome initiation in

Arabidopsis thaliana. Systems Biology: Global regulation of gene expression. Cold Spring Harbor Laboratory, NY, USA. March 23-26, 2006.

Morohashi, K., Minami, M., Takase, H., Hotta, Y., and Hiratsuka, K. Isolation and characterization of a novel GRAS gene that regulates meiosis-associated gene expression. Plant Gametophytes: Evolution, Development and Function. Ascona, Switzerland. June 8-13, 2003.

Morohashi, K., Takase, H., Hotta, Y., and Hiratsuka, K. Large-scale sequencing of meiosis-associated genes from a cDNA library of lily microsporocytes. 6th International Congress of Plant Molecular Biology. Quebec, Canada. June 18-24, 2000.

Current collaborators

Dr. Dave Jackson at Cold Spring Harbor Laboratory, USA --- Maize ChIP-Seq
Dr. Sarah Hake at UC Berkeley, USA --- Maize ChIP-Seq
Dr. Jenny Russinova at VIB, Belgium --- *Arabidopsis* ChIP-Seq
Dr. Lieven De Veylder at VIB, Belgium --- *Arabidopsis* ChIP-Seq
Dr. Keiko Sugimoto at RIKEN --- *Arabidopsis* trichome
Dr. Koji Kuramochi at Kyoto Prefectural University --- Phage display coupled with next-generation sequencing
Dr. Rivka Barg at ARO, Israel --- Tomato RNA-Seq
Dr. Marisa Otegui at University of Wisconsin --- Maize RNA-Seq
Dr. Stacey Harmer at UC Davis, USA --- Arabidopsis RNA-Seq
Dr. David Mackey at Ohio State Univeristy --- Maize and bacteria RNA-Seq