**CURRICULUM VITAE**

**Lynn J. Pillitteri, Ph.D**

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# BACKGROUND

# Education and Training

#### 2002 - Ph.D. Plant Genetics Botany Department, University of California, Riverside.

#### 1997 - M. S. Plant Biology Botany Department, University of California, Riverside.

#### 1993 - B. S. Biology State University of New York at Binghamton.

#### Professional Experience

2014- present **Associate Professor of Biology** – Western Washington University

2009-2014  **Assistant Professor of Biology** – Western Washington University

2003-2008 **Postdoctoral Fellow/Researcher –** Department of Biology,University of Washington, Seattle. Dr. Keiko U. Torii, advisor.

1997-2002 **Graduate Research Assistant, Ph.D. –** Botany and plant sciences, University of California Riverside. Dr. Linda L. Walling and Dr. Carol J. Lovatt, co-advisors.

1995-1997 **Graduate Student, M.S. –** Botany and plant sciences, University of California Riverside**.** Dr. Carol J. Lovatt, advisor.

# Publications

\* non-peer reviewed

Pillitteri L.J, Guo X, Dong J (2016). Mechanisms of symmetry breaking and cell-fate determination in plant development. *Cell Mol Life Sci* (accepted).

Mahoney A.K., Anderson E.M., Bakker R.A., Williams A.F., Flood\*\* J.J., Sullivan K.C., Pillitteri L.J. (2016). Functional analysis of the *Arabidopsis thaliana MUTE* promoter reveals a regulatory region sufficient for stomatal-lineage expression. *Planta* 243; 987-998. DOI: 10.1007/s00425-015-2445-7

Pillitteri, L.J. and J. Dong (2013). Stomatal development in Arabidopsis. The Arabidopsis Book.

e0162. 10.1199/tab.0162.

Pillitteri, L.J. and K.U. Torii (2012). Mechanisms of stomatal development. *Ann Rev Plant Biol* 63:591-614.

Pillitteri, L.J., Peterson, K.M., Horst, R.J., and K.U. Torii (2011). Molecular profiling of meristemoids reveals new component of asymmetric cell division and commonalities among stem-cell populations in Arabidopsis. *Plant Cell* 23:3260-3275.

* *Evaluated by Faculty of 1000*

\* Pillitteri, L.J., Bertling, I., Khuong, C.T., and C.J. Lovatt (2010). Foliar-applied tryptophan increases total yield and fruit size of *Citrus reticulata* (Blanco) cv. Fina sodea clementine mandarin. *Acta Horticulturae* 844:729-736.

Kanaoka, M.M., Pillitteri, L.J., Fujii, H., Yoshida, Y., Bogenschutz, N.L., Takabayashi, J., Xhu, J.K. and K.U. Torii (2008). SCREAM/ICE1 and SCREAM2 Specify Three Cell-State Transitional Steps Leading to Arabidopsis Stomatal Differentiation. *Plant Cell* 20: 1775-1785.

# Pillitteri, L.J., Bogenshutz, N.L. and K.U. Torii (2008). The bHLH Protein, MUTE, Controls Differentiation of Stomata and the Hydathode Pore in Arabidopsis. *Plant Cell Physiol* 49: 934-943.

Hord, C.L, H Sun, Y., Pillitteri, L.J., Torii, K.U., Wang, H. , Zhang, S. and H. Ma. (2008). Regulation of *Arabidopsis* early anther development by the mitogen-activated protein kinases, MPK3 and MPK6, and the ERECTA and related receptor-like kinases. *Mol Plant* 1: 645-658.

Pillitteri, L.J., Bemis, S.M., Shpak, E.D. and K.U. Torii (2007). Haploinsufficiency after successive loss of signaling reveals a role for *ERECTA*-family genes in Arabidopsis ovule development. *Development* 134: 3099-3109.

Pillitteri, L.J. and K.U. Torii (2007). Breaking the silence: Three bHLH proteins direct cell-fate decisions during stomatal development. *BioEssays* 29: 861-870.

Torii, K.U., Kanaoka, M.M., Pillitteri, L,J, and N.L. Bogenschutz (2007). Stomatal Development: Three steps for cell-type differentiation. *Plant Sig Behavior* 2: 311-313.

Pillitteri, L.J., Sloan, D.J., Bogenshutz, N.L. and K.U. Torii (2007). Termination of asymmetric cell division and differentiation of stomata. *Nature* 445: 501-505.

* *Evaluated by Faculty of 1000*
* *Commentary: Plant Development: Three steps for stomata. Gray, J.E. (2007****)*** *Curr Biol 17: R213-215.*
* *Commentary: Giving voice to stomata development. In “Leading Edge” (2007) Cell 128: 417.*

Shpak, E.D., McAbee, J.M., Pillitteri, L.J. and K.U. Torii. (2005) Stomatal patterning and differentiation by synergistic interactions of receptor kinases. *Science* 309: 290-293.

Pillitteri, L.J., Lovatt, C.J., and L.L. Walling (2004). Characterization of *CsLFY* and *CsAP1,* homologues of *LEAFY* and *APETALA1* from ‘Washington’ navel orange (*Citrus sinensis* L. Osbeck). *J Am Soc Hort Sci* 129: 846-856.

Pillitteri, L.J., Lovatt, C.J., and L.L. Walling (2004). Isolation and characterization of a TFL homologue and its correlation with juvenility in citrus. *Plant Physiol* 135: 1540-1551.

# SCHOLARSHIP

# Research Support, External

National Science Foundation #1147132

# Research Support, Internal

2016 Western Washington University Project Development Grant

2009 Western Washington University Project Development Grant #72,

**Invited Talks**

April 2016 – Trinity College, Dublin Ireland

September 2012 – University of Puget Sound Biology Department, Tacoma WA.

October 2011 – Open House, WWU campus.

April 2011 – American Association of University Women, WWU campus.

September 2009 - National Laboratory for Genomics and Biodiversity, Irapuato, Mexico.

**Conference abstracts**

Graduate/Undergraduate contributors are underlined

March 2009: Northwest Developmental Biology Conference, Friday Harbor Labs, Friday Harbor, Washington.

*L. J. Pillitteri and K. Torii. Mechanisms of cell-type differentiation during stomatal development in Arabidopsis thaliana.*

March 2010: Northwest Developmental Biology Conference, Friday Harbor Labs, Friday Harbor, Washington.

*L. J. Pillitteri and J. Shults. The isolation of mutants with altered expression of the Arabidopsis stomatal differentiation gene, MUTE.*

August 2010: FASEB Summer Research Conference, Mechanisms of Plant Development. Saxton River, Vermont.

*Rachael Bakker, Robert Park and Lynn Pillitteri. Characterization of novel regulators of stomatal development in Arabidopsis.*

August 2011: American Society of Plant Biologists Conference. Minneapolis, Minnesota

*Rachael Bakker and Lynn Pillitteri. Novel regulators of stomatal development in Arabidopsis.*

March 2013: Northwest Developmental Biology Conference, Friday Harbor Labs, Friday Harbor, Washington. Anthony Williams, Aaron Mahoney, Rachael Bakker and Lynn Pillitteri. *Promoter deletion analysis to identify cis-regulatory elements of the MUTE promoter.*

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August 2013: FASEB Summer Research Conference, Mechanisms of Plant Development. Saxton River, Vermont. Abstract submitted and accepted. Katrina Sullivan, Levi Boss, Tyler Ostler, and Lynn Pillitteri. *Characterization of two novel mutants; LONE GUARD CELLS and EXCESS INITIAION OF STOMATAL LINEAGES.*

August 2014: International Conference on Arabidopsis Research (ICAR) Vancouver, Canada Identification of regulatory cis-elements in the MUTE promoter. Katrina Sullivan, Aaron Mahoney, Racheal Bakker, Anthony Williams and Lynn Jo Pillitteri. (Katrina Sullivan, presenter).

April 2016: IPSAM Conference on Plant Science. Trinity College, Dublin Ireland. A molecular look at stomata: cell-fate decisions and improving drought tolerance. Lynn Pillitteri and Aaron Mahoney. (Lynn Pillitteri ,talk presenter)

# Contributing Research

Unites States Patent 6,169,057 B1

January 2, 2001

Use of Tryptophan and Analogs as Plant Growth Regulators.

United States Patent 6,180,569 B1

January 30, 2001

Use of Tryptophan and Analogs as Plant Growth Regulators.

## Genbank Accessions

*Arabidopsis thaliana* POLAR mRNA cds: JN663804

*Arabidopsis thaliana MUTE* genomic DNA cds: DQ864972

*Arabidopsis thaliana MUTE* mRNA cds: DQ863645

*Citrus sinensis LEAFY* genomic DNA cds; AY338976

*Citrus sinensis TERMINAL FLOWER* genomic DNA cds; AY344245

*Citrus sinensis TERMINAL FLOWER* cDNA cds; AY344244

*Citrus sinensis APETALA1* genomic DNA cds; AY338975

*Citrus sinensis APETELA1* cDNA cds; AY338974

EST database contributions: dbEST numbers 15402859-15402880

# TEACHING

**Courses**

BIOL 205: Introduction to Cellular and Molecular Biology. 5 credit lab/lecture, maximum

BIOL 324: Methods in Molecular Biology. 3 credit lab/lecture, maximum 24-48 students in

BIOL 451/551: Development of Plants. 3 credit lecture, maximum 20 students. Combination of undergraduate and graduate level teaching.

BIOL 323: Cell and Molecular Biology. 4 credit lecture, maximum 50 students.

BIOL 395, 494, 495, 498: Biology Research. Variable credit and student enrollees.