# Frank Wellmer - Curriculum Vitae

# PERSONAL DETAILS

Address: Division of Biology 156-29

California Institute of Technology

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Email: wellmer@caltech.edu

Date of Birth: May 5, 1970

Nationality: German

### **ACADEMIC EDUCATION**

December 1998 Ph.D. in Biology, summa cum laude

1996-1998 Graduate Program "Molecular Mechanisms of Plant Differ-

entiation", University of Freiburg (Germany)

Biochemical characterization of bZIP-type transcription factors

from parsley

Advisors: Dr. Eberhard Schäfer and Dr. Klaus Harter

November 1995 M.S. in Biology

11/1994 – 11/1995 Master's Thesis, Department of Biophysics, University of

Osnabrück (Germany)

Functional analysis of the E-subunit of the chloroplast ATP-

synthase

Advisors: Dr. Wolfgang Junge and Dr. Siegfried Engelbrecht

1990 – 1995 University of Osnabrück (Germany)

# PROFESSIONAL EXPERIENCE

9/2005 - Present Senior Research Fellow, California Institute of Technology

10/1999 – 8/2005 Postdoctoral Scholar, California Institute of Technology

Analysis of the gene regulatory networks underlying Arabidopsis

flower development

Advisor: Dr. Elliot M. Meyerowitz

01/1999 - 08/1999 Staff Member, University of Freiburg (Germany)

#### TEACHING EXPERIENCE

2003 and 2001 Participation in the Summer Undergraduate Research Fellowship

Program at Caltech. Advisor to undergraduate students conducting an independent research project during a two month-long

stay in the laboratory.

1998 Training and supervision of teaching assistants for a beginners

course in plant physiology (University of Freiburg).

1997 and 1998 Teaching assistant for an advanced course in plant physiology

(University of Freiburg).

1997 Teaching assistant for a beginners course in plant physiology

(University of Freiburg).

#### FELLOWSHIPS AND AWARDS

Emmy Noether Fellowship of the German Research Council (10/1999-9/2001)

Hans Grisebach Ph.D. Thesis Award of the University of Freiburg (1999)

Ph.D. Fellowship of the German Research Council (01/1996-12/1998)

## REFERENCES

Dr. Elliot M. Meyerowitz; George W. Beadle Professor and Chair, Division of Biology, California Institute of Technology, Pasadena, CA 91125, USA. Phone: +1 (626) 395-6889; Email: meyerow@caltech.edu

Dr. Eberhard Schäfer; Professor, Institute for Biology II, University of Freiburg, Schaenzlestr. 1, D-79104 Freiburg, Germany.

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Dr. José Luis Riechmann; Director, Genetics and Genomics Laboratory, California Institute of Technology, Pasadena, CA 91125, USA. Phone: +1 (626) 395-5913; Email: jriechma@caltech.edu

Dr. Klaus Harter; Professor, ZMBP, Plant Physiology, University of Tübingen, Auf der Morgenstelle 1, D-72076 Tübingen, Germany.

Phone: +49-7071-29-72605: Email: klaus.harter@zmbp.uni-tuebingen.de

#### **PUBLICATIONS**

- 1. Schulenberg, B., **Wellmer, F.**, Lill, H., Junge, W., and Engelbrecht, S. (1997) Cross-linking of the chloroplast F<sub>0</sub>F<sub>1</sub>-ATPase subunit epsilon to gamma without effects on activity. Epsilon and gamma are parts of the rotor. *Eur. J. Biochem.* **249**, 134-141.
- 2. Kircher, S., Wellmer, F., Nick, P., Rügner, A., Schäfer, E., and Harter, K. (1999) Nuclear import of the parsley bZIP transcription factor CPRF2 is regulated by phytochrome photoreceptors. *J. Cell. Biol.* **144**, 201-211.
  - \*equal contribution
- 3. **Wellmer, F.**, Kircher, S., Rügner, A., Frohnmeyer, H., Schäfer, E., and Harter, K. (1999) Phosphorylation of the parsley bZIP transcription factor CPRF2 is regulated by light. *J. Biol. Chem.* **274**, 29476-29482.
- 4. **Wellmer, F.**, Schäfer, E., and Harter, K. (2001) The DNA binding properties of the parsley bZIP transcription factor CPRF4a are regulated by light. *J. Biol. Chem.* **276**, 6274-6279.
- 5. Rügner, A., Frohnmeyer, H., Naeke, C., **Wellmer, F.**, Kircher, S., Schäfer, E., and Harter, K. (2001) Isolation and characterization of four novel parsley proteins that interact with the transcriptional regulators CPRF1 and CPRF2. *Mol. Gen. Genomics* **265**, 964-976.
- 6. Yu, H., Ito, T., **Wellmer, F.**, and Meyerowitz, E.M. (2004) Repression of *AGAMOUS-LIKE 24*: a critical step in promoting flower development. *Nat. Genet.* **36**,157-161.
- 7. **Wellmer, F.**, Riechmann, J.L., Alves-Ferreira, M., and Meyerowitz, E.M. (2004) Genome-wide analysis of spatial gene expression in *Arabidopsis* flowers. *Plant Cell* **16**, 1314-1326.
- 8. Wagner, D., Wellmer, F., Dilks, K., William, D., Smith, M.R., Kumar, P.P., Riechmann, J.L., Greenland, A.J., and Meyerowitz, E.M. (2004) Floral induction in tissue culture: a system for the analysis of LEAFY-dependent gene regulation. *Plant J.* 39, 273-282.
  - \* equal contribution
- 9. Ito, T., **Wellmer, F.**, Yu, H., Das, P., Ito, N., Alves-Ferreira, M., Riechmann, J.L., and Meyerowitz, E.M. (2004) The homeotic protein AGAMOUS controls microsporogenesis by regulation of *SPOROCYTELESS*. *Nature* **430**, 356-360.
- 10. Baker, C.C., Sieber, P., **Wellmer, F.**, and Meyerowitz, E.M. (2005) The *early extra petals1* mutant uncovers a role for microRNA *miR164c* in regulating petal number in *Arabidopsis. Curr. Biol.* **15**, 303-315.
- 11. **Wellmer, F.** and Riechmann, J.L. (2005) Gene network analysis in plant development by genomic technologies. *Int. J. Dev. Biol.* **49**, 745-759.
- 12. **Wellmer, F.**, Alves-Ferreira, M., Dubois, A., Riechmann, J.L., and Meyerowitz, E.M. (2005) Whole-genome analysis of gene expression during early *Arabidopsis* flower development. *Submitted*

# **MANUSCRIPTS IN PREPARATION**

Alves-Ferreira, M., **Wellmer, F.**, and Meyerowitz, E.M. Global expression profiling applied to the analysis of *Arabidopsis* stamen development.