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**EDUCATION**

Ph.D. Molecular, Cellular and Developmental Biology  
University of South Carolina, Department of Biological Sciences  
1998-2003

B.S. in Agricultural Science/ Agricultural Biotechnology  
University of Kentucky  
1994-1998; *Cum laude* honors

**HONORS & AWARDS**

2004-current National Institute of Health, Ruth L. Kirschstein Postdoctoral Fellowship  
2004 and 2005 Whitehead Institute Director's Fellowship Allowance  
2003 University of South Carolina, Dissertation Award  
2002 University of South Carolina, Graduate School Travel Award  
International Union of Microbiological Societies Scholarship  
Gorden Belser Botany Fellowship  
Batson Outstanding Plant Biology Graduate Student Award  
Gerald Wilson Outstanding Graduate Student Award  
2001 Gorden Belser Botany Fellowship  
Kathryn Hinnant-Johnson M.D. Award in Genetics  
2000 Albert Krall Memorial Award  
1999-2001 National Science Foundation Industry/Graduate Research Fellowship  
1997-1998 University of Kentucky Undergraduate Research and Creativity Grant  
Howard Hughes Medical Institute research grant  
University of Kentucky, College of Agriculture Academic Scholarship  
1996-1997 University of Kentucky, College of Agriculture Academic Scholarship  
1995 University of Kentucky, President's List

**PUBLICATIONS**

**Primary Author:**

Gascioli, V. \*, Mallory, A.C. \*, Bartel, D.P. and Vaucheret, H. (2005) Partially redundant functions of Arabidopsis DICER-LIKE enzymes and a role for DCL4 in producing trans-acting siRNAs. *Current Biology* 15, 1494-1500. \*These authors contributed equally

Mallory, A.C., Bartel, D.P. and Bartel B. (2005) MicroRNA-directed regulation of *AUXIN RESPONSE FACTOR 17* is essential for early auxin response gene expression and development in Arabidopsis. *Plant Cell* 5, 1360-1375.

Mallory, A.C. \*, Reinhart, B.J. \*, Jones-Rhoades, M., Tang, G., Zamore, P.D., Barton, M.K. and Bartel, D.P. (2004) MicroRNA control of *PHABULOSA* in leaf development: importance of pairing to the microRNA 5' region. *EMBO Journal* 23, 3356-3364. \*These authors contributed equally

Mallory, A.C. \*, Dugas, D.V. \*, Bartel, D.P. and Bartel B. (2004) MicroRNA regulation of NAC-domain targets is required for proper formation and separation of adjacent embryonic, vegetative and floral organs. *Current Biology* 14, 1035-1046. \* These authors contributed equally

**Mallory, A.C.** and Vaucheret, H. (2004) MicroRNAs: something important coming from between the genes. *Current Opinions in Plant Biology* 7, 120-125.

**Mallory, A.C.**, Mlotshwa, S., Bowman, L.H. and Vance, V.B. (2003) The capacity of transgenic tobacco to send a systemic RNA silencing signal depends on the nature of the inducing transgene. *Plant Journal* 35, 82-92.

**Mallory, A.C.**, Reinhart, B.J., Bartel, D., Vance, V.B. and Bowman, L.H. (2002) A viral suppressor of RNA silencing differentially regulates the accumulation of short interfering RNAs and micro-RNAs in tobacco. *Proc. Natl. Acad. Sci. USA* 12, 15228-15233.

**Mallory, A.C.**, Parks, G., Endres, M.W., Baulcombe, D., Bowman, L.H., Pruss, G.J. and Vance, V.B. (2002) The amplicon-plus system for high-level expression of transgenes in plants. *Nature Biotechnology* 20, 622-625.

**Mallory, A.C.**, Ely, L., Smith, T.H., Marathe, R., Anandalakshmi, R., Fagard, M., Vaucheret, H., Pruss, G., Bowman, L. and Vance, V.B. (2001) HC-Pro suppression of transgene silencing eliminates the small RNAs but not transgene methylation or the mobile signal. *Plant Cell* 13, 571-583.

#### **Contributing Author:**

Vaucheret, H.V., **Mallory, A.C.**, Bartel, D.P. A posttranscriptional feedforward loop involving miR168 and ARGONAUTE1 maintains microRNA homeostasis. In preparation

Mlotshwa S., Schauer, S.E., Smith, T.H., **Mallory, A.C.**, Herr, J.M., Roth, B., Merchant, D.S., Ray, A., Bowman, L.H. and Vance, V.B. (2005) Ectopic *DICER-LIKE1* expression in P1/HC-Pro Arabidopsis rescues phenotypic anomalies but not defects in microRNA and silencing pathways. *Plant Cell* Oct 7; [Epub ahead of print] PMID: 16214897.

Vazquez, F., Vaucheret, H., Rajogopalan, R., Lepers, C., Gascioli, V., **Mallory, A.C.**, Hilbert, j-L., Bartel, D.P. and Cr  t  , P. (2004) Endogenous *trans*-acting siRNAs regulate the accumulation of Arabidopsis mRNAs. *Molecular Cell* 16, 69-79.

Anandalakshmi, R., Marathe, R., Xin, G., Herr, J.M., Mau C., **Mallory, A.**, Pruss, G., Bowman, L. and Vance, V.B. (2000) A calmodulin-related protein suppresses posttranscriptional gene silencing in plants. *Science* 290, 142-144.

Anandalakshmi, R., Pruss, G.J., Xin G., Marathe, R., **Mallory, A.C.**, Smith, T.H. and Vance, V.B. (1998) A viral suppressor of gene silencing in plants. *Proc. Natl. Acad. Sci. USA* 95, 13079-13084.

Wilkinson, H.H., Siegel, M.R., Blankenship, J.D., **Mallory, A.C.**, Bush, L.P. and Schardl, C.L. (2000) Contribution of fungal loline alkaloids to protection from aphids in a grass-endophyte mutualism. *Molecular Plant Microbe Interactions* 13, 1027-1033.

#### **SCIENTIFIC MEETING ORAL PRESENTATIONS**

**Mallory, A.C.**, Bartel B. and Bartel D.P. MicroRNA regulation of plant development. 5<sup>th</sup> Biennial Meeting on Post-Transcriptional Regulation of Plant Gene Expression, Austin, Texas, June 2005.

**Mallory, A.C.**, Parks G., Endres M., Bowman L. and Vance V.B. The amplicon-plus system for high-level expression of transgenes in plants. International Union of Microbiological Societies World Congresses, XII<sup>th</sup> International Congress of Virology, Paris, France, July 2002.

**Mallory, A.C.**, Bowman L. and Vance V.B. HC-Pro interferes with RNA silencing and prevents the accumulation of a subset of small RNAs. Southeastern Regional Virology Meeting, Atlanta, Georgia, April 2002.

**Mallory, A.C.,** Roth B., Smith T.H. and Vance V.B. RNA silencing in plants. American Phytopathological Society Annual Meeting, Salt Lake City, Utah, August 2001.

**Mallory, A.C.** and Vance V.B. Investigating the role of small RNAs in RNA silencing. 20<sup>th</sup> Annual Meeting of the American Society for Virology. Madison, Wisconsin, July 2001.

**Mallory, A.C.,** Ely L. and Vance V.B. A viral suppressor of post transcriptional gene silencing functions downstream of transgene methylation and the mobile silencing signal. Southern Division Meeting of American Phytopathological Society, Gainesville, Florida, March 2000.

**Mallory, A.C.,** Wilkinson H.H. and Schardl C.L. Genetics of a bioprotective alkaloid biosynthesis in grass-endophyte symbioses. Kentucky Academy of Science. Moorehead, Kentucky, November 1997 (oral presentation).

## **ORGANIZATION MEMBERSHIP**

American Association for the Advancement of Science (AAAS)

## **TEACHING EXPERIENCE**

2001. Department of Biological Sciences, University of South Carolina, Animal Physiology Lab instructor (BIOL 460L). Lectured weekly on advanced topics in animal physiology. Designed lectures, quizzes and exams.

1998. Department of Biological Sciences, University of South Carolina, Biology Principles II Lab instructor (BIOL 102L). Lectured weekly on introductory biology topics including basic plant and animal biology, microbiology and taxonomy. Designed all lectures, quizzes and exams.

## **RESEARCH EXPERIENCE**

Postdoctoral Fellow, Whitehead Institute for Biomedical Research, Laboratory of David Bartel, January 2003-current. Researching microRNA-directed regulation in the model system *Arabidopsis thaliana*.

Graduate Research Assistant, University of South Carolina, Department of Biological Sciences, Laboratory of Vicki Vance, August 1998-December 2002. Investigated viral suppression of RNA silencing in the model system *Nicotiana tabacum*.

Undergraduate Research, University of Kentucky, Department of Plant Pathology, Laboratory of Christopher Schardl, 1997-1998. Researched the genetics of loline alkaloid biosynthesis in grass-endophyte symbioses.

## **REFERENCES**

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Vicki Vance, Professor, University of South Carolina, Department of Biological Sciences, Columbia, SC 29208 USA  
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