

# Simon W.-L. Chan

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## Education and Research Experience

- July 2006-            **University of California, Davis**, Davis, CA  
**Assistant Professor**
- 2002-2006            **University of California, Los Angeles**, Los Angeles, CA  
**Postdoctoral fellowship**  
Advisor: Dr. Steven E. Jacobsen
- 1996-2002            **University of California, San Francisco**, San Francisco, CA  
**Ph.D.** in Cell Biology.  
Advisor: Dr. Elizabeth H. Blackburn
- 1992-1995            **University of Auckland**, Auckland, New Zealand  
**Bachelor of Science (with Honours)** in Biochemistry.  
Advisor: Dr. Nigel P. Birch

## Awards

- 2006                    American Society of Plant Biologists Early Career Award  
2004                    UCLA Boyer-Parvin Postdoctoral Award  
2003-2006            Life Sciences Research Foundation Postdoctoral Fellowship (sponsored by the  
U.S. Department of Energy, Energy BioSciences division)  
1997-2002            Howard Hughes Medical Institute Predoctoral Fellowship

## Advanced Coursework

- 2008                    National Academies Education Fellow in the Life Sciences (attended The  
National Academies Summer Institute on Undergraduate Education in Biology).  
2003                    QB3 Microarray Course at UC Santa Cruz (taught by Dr. Joseph Derisi and  
colleagues).

## Publications

**Chan, S.W.L.**

Inputs and outputs for chromatin-targeted RNAi.

**Trends in Plant Sciences** 7, 383-389 (2008)

**Chan, S.W.L.**, Zhang, X., Bernatavichute, Y.V. and Jacobsen, S.E.

Two-step recruitment of RNA-directed DNA methylation to tandem repeats.

**PLoS Biology** 4, e363 (2006)

Peng, P., **Chan, S.W.L.**, Shah, G., and Jacobsen, S.E.

Elevated outcrossing in *hothead* mutants.

**Nature** 443, E8 (2006)

Zhang, X.\*, Yazaki, J.\*, Sundaresan, A\*., Cokus, S\*, **Chan, S.W.L.**, Chen, H., Henderson, I.R., Shinn, P., Pellegrini, M., Jacobsen, S.E. and Ecker, J.R.

Genome-wide high-resolution mapping and functional analysis of DNA methylation in *Arabidopsis*.

**Cell** 126, 1189-1201 (2006)

Li, C.F., Pontes, O., El-Shami, M., Henderson, I.R., Bernatavichute, Y.V., **Chan, S.W.L.**, Lagrange, T., Pikaard, C.S. and Jacobsen, S.E.

An ARGONAUTE4-containing nuclear processing center co-localized with Cajal bodies in *Arabidopsis thaliana*.

**Cell** 126, 93-106 (2006)

**Chan, S.W.L.**, Henderson, I.R., Zhang, X., Chien, J., Shah, G. and Jacobsen, S.E.

RNAi, DRD1 and histone methylation actively target developmentally important non-CG DNA methylation in *Arabidopsis*.

**PLoS Genetics** 2, e83 (2006)

**Chan, S.W.L.\***, Henderson, I.R.\* and Jacobsen, S.E.

Gardening the genome: DNA methylation in *Arabidopsis thaliana*.

**Nature Reviews Genetics** 6 351-360 (2005) [review article]

Mockler, T.C., **Chan, S.**, Sundaresan A., Chen, H., Jacobsen S.E. and Ecker, J.R.

Applications of DNA tiling arrays for whole-genome analysis.

**Genomics** 85 1-15 (2005) [review article]

Morris, K.V., **Chan, S.W.L.**, Jacobsen, S.E. and Looney, D.J.

siRNA-induced transcriptional gene silencing in human cells.

**Science** 305, 1289-1292 (2004)

**Chan, S.W.L.**, Zilberman D., Xie, Z., Johansen, L.K., Carrington, J.C. and Jacobsen, S.E.

RNA silencing genes control *de novo* DNA methylation.

**Science** 303, 1336 (2004)

**Chan, S.R.W.L.** and Blackburn, E.H.

Telomeres and telomerase.

**Phil. Trans. R. Soc. Lond. B** 359, 109-121 (2004)

**Chan, S.W.L.** and Blackburn, E.H.  
Telomerase and ATM/Tel1p protect telomeres from non-homologous end-joining.  
**Molecular Cell** 11, 1379-1387 (2003)

**Chan, S.W.L.** and Blackburn, E.H.  
New ways not to make ends meet.  
**Oncogene** 21, 553-563 (2002) [review article].

**Chan, S.W.L.**, Chang, J., Prescott, J. and Blackburn, E.H.  
Altering telomere structure allows telomerase to act in yeast lacking ATM kinases.  
**Current Biology** 11, 1240-1250 (2001).

Blackburn, E.H., **Chan, S.**, Chang, J., Fulton, T.B., Krauskopf, A., McEachern, M., Prescott, J., Roy, J., Smith, C. and Wang, H.  
Molecular manifestations and molecular determinants of telomere capping.  
**Cold Spring Harbor Symposia on Quantitative Biology**, 65, 253-263 (2000)

\* denotes equal contribution

## Recent Presentations

Invited talk, International Plant Epigenome conference, Sydney, Australia  
September 2008

Invited seminar, University of Wisconsin at Madison  
July 2008

Chan, S.W.L., Bernatavichute, Y.V., Zhang, X.Y. and Jacobsen, S.E.  
Tandem repeats, siRNAs and DNA methylation in *Arabidopsis*. (oral presentation)  
Sir Mark Oliphant Conference on Epigenetic Regulation in Disease and Development, in Canberra, Australia. December 2005

## Memberships

American Society of Plant Biologists  
American Society for Cell Biology