

Simon W.-L. Chan

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Department of Plant Biology
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Education and Research Experience

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| 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

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| 2010 | Basil O'Connor Starter Scholar Award, March of Dimes |
| 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

Ravi, M. and **Chan, S.W.L.**
Haploid plants produced by centromere-mediated genome elimination
Nature in press (2010)

Henderson, I.R., **Chan, S.R.**, Cao, X., Johnson L. and Jacobsen S.E.
Accurate sodium bisulfite sequencing in plants
Epigenetics in press (2010)

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 seminar, Temasek Life Sciences Laboratory, Singapore
June 2009

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

Invited seminar, University of Wisconsin at Madison
July 2008

Memberships

American Society for Cell Biology