# Yi Wei Jiang, Ph.D.

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Education 7/89 3/96 9/96-7/99	B.S. in biology, University of Science and Technology of China, Hefei, China. Ph.D., University of Utah. Postdoctoral Fellow, Stanford University.
Research	
9/90-8/96	Ph.D. thesis research plus postdoctoral training in Dr. David J. Stillman's lab: 1) Complex in vivo functions of yeast pol II Mediator of transcriptional regulation; 2) Epigenetic control of transcription in yeast.
9/96-7/99	Postdoctoral training in Dr. Roger D. Kornberg's lab:  1) Biochemical purification and molecular characterization of mouse pol II Mediator complex;  2) Development of a reporting system for detecting new classes of yeast epigenetic control of gene expression and discovery of posttranscriptional silencing in yeast.
7/99-present	Tenure-track Assistant Professor, Department Medical Biochemistry and Genetics, Texas A&M University System Health Science Center,.

## **Previous Awards**

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9/92-6/93	University Research Fellowship, University of Utah, \$5,000.
1/97-7/99	Damon Runyon-Walter Winchell Postdoctoral Fellowship, \$96,000.
1/01-12/02	Tobacco Enhancement Fund, PI, \$75,000 total cost.
1/01-12/03	Damon Runyon Scholar Award, PI, \$300,000 total cost.
7/02-12/04	BIOS Program, DARPA/DOD, PI, \$375,000 total cost.
	Yeast TNT-chemosensor arrays with recombined canine olfactory receptors.

# **Current funding**

01/04-12/08 NIH R01GM65320, PI, \$180,000 annual direct cost for five years.

Cossupression of Ty1 Retrotransposon in S. cerevisiae

### **Publications**

(20 published, 4 submitted and 1 manuscript in preparation, \* corresponding author)

Involvement of the SIN4/TSF3 Global Transcriptional Regulator in the Chromatin Structure of Saccharomyces cerevisiae.

Yi Wei Jiang and David J. Stillman, Mol. Cell. Biol. 12: 4502-4515 (1992).

Yeast Global Transcriptional Regulators *SIN4* and *RGR1* Are Components of a Subcomplex of the RNA Polymerase II Holoenzyme.

Li, Yang, Stefan Bjorklund, <u>Yi Wei Jiang</u>, Young-Joon Kim, William S. Lane, David J. Stillman and Roger D. Kornberg. PNAS 92: 10864-10868 (1995).

Regulation of *HIS4* Expression by the *Saccharomyces cerevisiae SIN4* Transcriptional Regulator.

Yi Wei Jiang and David J. Stillman, Genetics 140: 103-114 (1995).

Genetic and Physical Interactions between Yeast RGR1 and SIN4 in Chromatin Organization and Transcriptional Regulation.

Yi Wei Jiang, Paul R. Dohrmann and David J. Stillman, Genetics 140: 47-54 (1995).

Mutations in the Homologous *ZDS1* and *ZDS2* Genes Affect Cell Cycle Progression. Yaxin Yu, <u>Yi Wei Jiang</u>, Raymund J. Wellinger, Karen Carlson, James M. Roberts, and David J. Stillman. Mol. Cell. Biol.16: 5254-5263 (1996).

Epigenetic Effects on Yeast Transcription Caused by Mutations in an Actin-related Protein Present in the Nucleus.

Yi Wei Jiang and David J. Stillman, Genes & Development 10: 604-619 (1996).

Global Alteration in Chromatin Accessibility Associated with Loss of *SIN4* Function. Timothy Macatee, <u>Yi Wei Jiang</u>, David J. Stillman and Sharon Y. Roth. NAR 25:1240-1247 (1997).

Mammalian Mediator of Transcriptional Regulation and Its Possible Role as an End-Point of Signal Transduction Pathways.

Yi Wei Jiang, P. Veschambre, H. Erdjument-Bromage, P. Tempst, J. W. Conaway, R. C. Conaway and R. D. Kornberg. PNAS 95: 8538-8543 (1998).

Conserved Structures of Mediator and RNA Polymerase II Holoenzyme. Francisco J. Asturias, <u>Yi Wei Jiang</u>, Lawrence C. Meyers, Claes M. Gustafsson and Roger D. Kornberg. Science. 283:985-987 (1999).

The Nuclear Actin-related Protein of S. cerevisiae, Act3/Arp4, Interacts with Core Histones.

Harata, M., Y. Oma, S. Mizuno, <u>Yi Wei Jiang</u>, D. J. Stillman, and U. Wintersberger. Mol. Biol. Cell. 10: 2595-2605 (1999).

Structural Organization of Yeast and Mammalian Mediator Complexes. Dotson MR, Yuan CX, Roeder RG, Myers LC, Gustafsson CM, <u>Jiang YW</u>, Li Y, Kornberg RD, Asturias FJ. PNAS. 97(26): 14307-14310 (2000).

A Multiprotein Complex That Interacts with RNA Polymerase II Elongator. Li Y, Takagi Y, <u>Jiang YW</u>, Tokunaga M, Erdjument-Bromage H, Tempst P, Kornberg RD. J Biol Chem. 276(32): 29628-29631 (2001).

Transcriptional Cosuppression of Yeast *Ty1* Retrotransposons Jiang Y.W\*. Genes & Development 16: 467-478 (2002).

New 'Marker Swap' Plasmids for Converting Selectable Markers on Budding Yeast Gene Disruptions and Plasmids.

Voth W. P., Jiang Y.W. and Stillman D. J. Yeast 20: 985-93 (2003).

Induction of *S. cerevisiae* Filamentous Differentiation by Slowed DNA Synthesis Involves Mec1, Rad53 and Swe1 Checkpoint Proteins. Jiang Y.W\*. and Kang C. M. Mol. Biol. Cell 14: 5116-24 (2003)

Genome-wide Survey of Genes Required for Filamentous Differentiation of *S. cerevisiae*.

Kang C. M. and <u>Jiang Y.W\*</u>. Yeast 22(2): 79-90 (2005).

Integration of Upstream Signals at Cdc42 in Filamentous Differentiation of *S. cerevisiae* Xiaofeng Wu and Yi Wei Jiang\*. Yeast (In press, 2005)

Genetic/Genomic Evidence for A Key Role of Polarized Endocytosis in Filamentous Differentiation of S. cerevisiae

Xiaofeng Wu and Yi Wei Jiang\*. Yeast (In press, 2005)

Structure and Biosynthesis of the BT Peptide Antibiotic from *Brevibacillus texasporus* Xiaofeng Wu, Johnathan Ballard and <u>Yi Wei Jiang\*</u>. Applied and Environmental Microbiology (In press, 2005)

The Efficacy of TAMUS 2032 (BT) in Preventing a Natural Outbreak of Colibacillosis in Broiler Chickens in Floor Pens.

Y. W. Jiang\*, M. D. Sims, and D. P. Conway Poultry Science (In press, 2005)

Reg1-dependent Glucose Repression of *Ty1* Transcription and Transposition in *S. cerevisiae* 

Xiaofeng Wu and Yi Wei Jiang\* (submitted, 2005)

Gcn4-mediated, *Ty1* Transcriptional Pseudo-Cosuppression. Xiaofeng Wu and Yi Wei Jiang\* (submitted, 2005)

Inhibition of the Filamentous MAPK Pathway by ATP/CPF: A Gcn4-independent Mechanism for *Ty1* Transcriptional Pseudo-cosuppression Xiaofeng Wu and Yi Wei Jiang\* (submitted, 2005)

The Growth Promotion Efficacy of TAMUS 2032 (BT) in Comparison to BMD in Broiler Chickens in Floor Pens

Y. W. Jiang\*, Terry N. Terhune and D. P. Conway (submitted, 2005)

The Glc7 Phosphatase Inhibits Ty1 Transcriptional Pseudo-cosuppression by Opposing Gcn2-mediated Gcn4 Translational Activation in *S. cerevisiae* Xiaofeng Wu and Yi Wei Jiang\* (in preparation, 2005)

#### Patent

Compositions, Methods And Uses for A Novel Family of Peptides Yi Wei Jiang, US (11/046,560) and PCT (PCT/US2005/003343) patent applications (01/2005)

### References

Roger Kornberg, Professor,

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