



Y.-T. Chang

Young-Tae Chang

Date of birth: August 17, 1968
Position: Professor, Department of Chemistry, National University of Singapore (NUS)
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Education: 1991 BS, POSTECH
 1997 PhD with Sung-Kee Chung, POSTECH
 1997–2000 Postdoc with Peter G. Schultz, University of California, Berkeley, and The Scripps Research Institute
Awards: 2005 NSF Career Award; 2012 Outstanding Scientist Award, Faculty of Science, NUS
Current research interests: Universal platforms for bioimaging and sensing; artificial tongues; molecular evolution; molecular cellomics
Hobbies: Korean drumming, photography, forensic science, history, Evernote

The author presented on this page has recently published his **10th article** in *Angewandte Chemie* in the last 10 years:

“A Diradical Approach towards BODIPY-Based Dyes with Intense Near-Infrared Absorption around $\lambda = 1100$ nm”: Y. Ni et al., *Angew. Chem. Int. Ed.* **2016**, 55, 2815; *Angew. Chem.* **2016**, 128, 2865.

My favorite author (fiction) is Shiono Nanami.

My favorite pieces of music are *The Phantom of the Opera* and Mozart's *Requiem*.

The most important thing I learned from my parents is be welcoming to the guests who come to my home.

If I could have dinner with three famous scientists from history, they would be Albert Einstein, R. B. Woodward, and Archimedes.

My not-so-secret passion is to make the invisible become visible.

If I were not a scientist, I would be an oriental medical doctor working with acupuncture and natural products.

My greatest achievement has been establishing the diversity-oriented fluorescence library approach (DOFLA) for universal probe and sensor development.

My worst nightmare is going back to army camp.

My biggest motivation is to help solve problems for anybody who seeks a solution.

The best advice I have ever been given is “try to be excellent, not to be perfect”.

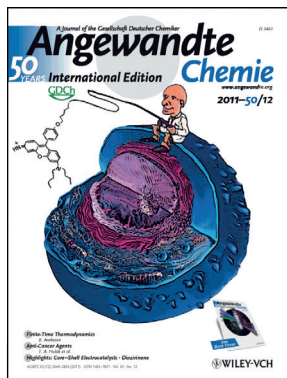
My most exciting discovery to date has been creating a colorful fluorescent chemical library.

The most significant scientific advance of the last 100 years has been the development of quantum mechanics.

My 5 top papers:

1. “Synthesis and application of functionally diverse 2,6,9-trisubstituted purine libraries as CDK inhibitors”: Y.-T. Chang, N. Gray, G. R. Rosania, D. P. Sutherlin, S. Kwon, T. Norman, R. Sarohia, M. Leost, L. Meijer, P. G. Schultz, *Chem. Biol.* **1999**, 6, 361. (Led to many follow-up works.)
2. “Forward chemical genetic approach identifies new role for GAPDH in insulin signalling”: J.-K. Min, Y. K. Kim, P. G. Cipriani, M. Kang, S. M. Khersonsky, D. P. Walsh, J.-Y. Lee, S. Niessen, J. R. Yates, K. Gunsalus, F. Piano, Y.-T. Chang, *Nat. Chem. Biol.* **2007**, 3, 55. (Tagged library for chemical genetics in order to elucidate a drug candidate for diabetic treatment by using *C. elegans* screening.)
3. “A Fluorescent Rosamine Compound Selectively Stains Pluripotent Stem Cells”: C.-N. Im et al., *Angew. Chem. Int. Ed.* **2010**, 49, 7497; *Angew. Chem.* **2010**, 122, 7659. (Stem cells can selectively be detected and isolated for culture.)
4. “Chemical Fluorescent Probe for Detection of A β Oligomers”: C. L. Teoh et al., *J. Am. Chem. Soc.* **2015**, 137, 13503. (Not only plaques but also A β oligomers can be selectively stained.)
5. “NeuO: a Fluorescent Chemical Probe for Live Neuron Labeling”: J. C. Er et al., *Angew. Chem. Int. Ed.* **2015**, 54, 2442; *Angew. Chem.* **2015**, 127, 2472. (Live neurons can be brightly imaged in the whole body of a mouse.)

International Edition: DOI: 10.1002/anie.201602703
 German Edition: DOI: 10.1002/ange.201602703



The work of Y.-T. Chang has been featured on the cover of *Angewandte Chemie*:
 “The Binding of Proteins to Fluorophores Depends on the Cellular Environment”: Y. K. Kim et al., *Angew. Chem. Int. Ed.* **2011**, 50, 2761; *Angew. Chem.* **2011**, 123, 2813.