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## EDUCATION

11/2014 – present

Research Associate, Department of Chemical Physiology, The Scripps Research Institute La Jolla. (advisor: Prof. **John R. Yates III**)

06/2009 – 09/2014

Ph.D., Department of Chemistry, Scripps Florida, (advisor: Prof. **Thomas J. Kodadek**)

08/2008 – 05/2009

Graduate student, Department of Biochemistry, University of Texas Southwestern Medical Center at Dallas, (advisor: Prof. **Thomas J. Kodadek**)

08/2004 – 06/2008

B.S. in Pharmaceutical Science (undergraduate advisor: Prof. **Junyi Liu**), School of Pharmaceutical Science, Peking University Health Science Center, Beijing, China

## PUBLICATION

1. Todd Doran, **Yu Gao**, Scott Simanski, Patrick McEnaney, Thomas Kodadek. "High Affinity Binding of Conformationally Constrained Synthetic Oligomers To An Antigen-Specific Antibody: Discovery of a Diagnostically Useful Synthetic Ligand For Murine Type 1 Diabetes Autoantibodies", *Bioorganic & Medicinal Chemistry Letters*, submitted.
2. **Yu Gao**, Thomas Kodadek. "Direct Comparison of Linear and Macrocyclic Compound Libraries as a Source of Protein Ligands", *ACS Combinatorial Sciences*, 2015, 17 (3), 190–195.  
\***ACS Editors' Choice**
3. **Yu Gao**, Sabrina Amar, Sonia Pahwa, Gregg Fields, Thomas Kodadek. "Rapid Lead Discovery Through Iterative Screening of One Bead One Compound Libraries", *ACS Combinatorial Sciences*, 2015, 17 (1), 49–59.
4. Bani Sarma, Xiaodan Liu, **Yu Gao**, Thomas Kodadek. "Solid Phase Synthesis of 1,3,4-oxadiazin-5 (6R)-one and 1,3,4-oxadiazol-2-one Scaffolds from Acyl Hydrazides", *Organic & Biomolecular Chemistry*, 2015, 13, 59.

5. Todd Doran, **Yu Gao**, Kimberley Mendes, Sonja Dean, Thomas Kodadek. "The Utility of Redundant Combinatorial Libraries In Distinguishing High and Low Quality Screening Hits", *ACS Combinatorial Sciences*, 2014, 16 (6), 259–270.
6. **Yu Gao**, Thomas Kodadek. "Split-and-pool Synthesis and Characterization of Peptide Tertiary Amide Library", *Journal of Visualized Experiments*, (88), e51299.
7. Suzanne G. Rzuczek, **Yu Gao**, Zhenzhi Tang, Charles Thornton, Thomas Kodadek, and Matthew D. Disney. "Features of Modularly Assembled Compounds That Impart Bioactivity Against an RNA Target", *ACS Chemical Biology*, 2013, 8(10) 2312–2321.
8. **Yu Gao**, Thomas Kodadek. "Synthesis and Screening of Stereochemically Diverse Combinatorial Libraries of Peptide Tertiary Amides", *Chemistry & Biology*, Volume 20, Issue 3, 360-369.
9. Xiaowei Wang, **Yu Gao**, Yang Xu, Junyi Liu. "An efficient preparation of a photolabile agent MNI-glu by regioselective nitration of 4-methoxyindoline derivative", *Synthetic Communications*, 41(2009), 15, 4030-4038.
10. **Yu Gao**, Ruirui He, Yun He, Taole Liu, Rong Qi, Guoqing Liu. "PEG-conjugated PAMAM dendrimers mediate efficient intramuscular gene expression", *The AAPS Journal*, 11 (2009), 3, 395-405
11. **Yu Gao**, Yun He, Taole Liu, Rong Qi. "Recent Advances of Dendrimers in Delivery of Genes & Drugs", *Mini-Reviews in Medicinal Chemistry*, 8 (2008), 889-900.
12. Qing Zhang, **Yu Gao**, Yongai Zhai, Fengqi Liu, Ge Gao. "Synthesis of sesbania gum supported dithiocarbamate chelating resin and studies on its adsorption performance for metal ions", *Carbohydrate Polymers*, 73(2), 2008, 359–363.
13. Honghai Sun, **Yu Gao**, Yongai Zhai, Qing Zhang, Fengqi Liu, Ge Gao. "Recent Advances in Synthesis of Chiral Ionic Liquids", *Progress in Chemistry*, 20 (2008), 698-712.
14. Yongai Zha, **Yu Gao**, Fengqi Liu, Qing Zhang, Ge Gao. "Synthesis of nanostructured TiO<sub>2</sub> particles in room temperature ionic liquid and its photocatalytic performance", *Materials Letters*, 61 (2007), 5056–5058

## PATENT

1. **Yu Gao**, Thomas Kodadek. "Synthesis of Libraries of Peptide Tertiary Amides", US Patent PCT/US2012/061963.
2. Li Li, **Yu Gao**, Xiaowei Wang, Junyi Liu. "Synthesis of Non-Nucleoside Reverse Transcriptase Inhibitor Emivirine and Analogues", China Patent # 201010136763.0.

## ORAL PRESENTATION

1. 8th Peptoid Summit at University of California, Berkeley, invited oral presentation, "Conformational Restricted Foldamers: From Peptoid to Natural Product-Like Molecules"

- 2.** ACS 244th meeting at Philadelphia, oral presentation in Materials for Health and Medicine, oral presentation "Synthesis and screening of stereochemically diverse combinatorial libraries of peptide tertiary amides"
- 3.** ACS 240th meeting at Boston, oral presentation in Peptides, Proteins and Amino Acids, oral presentation "Comparison study of cyclic and linear peptoid libraries for high throughput screening"