

*Chemistry/Biochemistry*  
*Planning Group Members: Monica Pischetsrieder and Hiroaki Suga*

*Chemical biology- New approaches for drug discovery*

*Speaker:*

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**Title:** Chemical Biology of Gene Expression

In human history, small organic molecules have been utilized for improving human health and for revealing secrets of life. Discovery or design of small organic molecules with unique biological activity permits small-molecule-initiated exploration of biology and further understanding of human diseases. Our laboratory has been discovering and designing synthetic small molecules that modulate gene expression and cellular signaling, with the goal of understanding physiology and human diseases. This presentation provides a quick overview of the chemical biology research in our group, focusing on the discovery and utilization of wrencholol, synthetic transcription factor, and chromeceptin. The implications of the results and the strength and weakness of the approach will be discussed.

#### ***References***

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