Professor LIU Chuan Fa School of Biological Sciences (SBS) NTU

My lab's RNA focus:

NH

1. Study of RNA modification through chemical synthesis.

2. Development of siRNA and anti-sense oligonucleotide therapeutics.

40% methylamine

Main methodologies:

1. Nucleic acid chemistry concerning nucleosides, nucleotides, phosphoramidites and oligonucleotides, especially those containing modified nucleobases, backbone and ribose.

2. Delivery systems for siRNAs and ASOs.

OTBS

OH

TBSCI, Imidazole

mesitylenesulfonyl-Cl → DMAP, Et₃N, ACN

Collaborative potential:

1. Application of siRNA and ASO therapeutics in different disease areas.

2. Use of siRNAs and ASOs with improved delivery for the study of gene functions.

