“β-Hairpin Peptides Containing a Novel β-Turn Mimic and an Unnatural Amino Acid that Mimics a Peptide β-Strand” Hashemzadeh, M.; Nowick, J. S. Presented at the 228th National Meeting of the American Chemical Society, Philadelphia, PA, August 2004; paper ORG 451.

Abstract: This paper describes β-hairpin peptides containing δ-ornithine, which mimics a β-turn, and the unnatural amino acid Hao, which mimics the conformation and hydrogen-bonding functionality of a β-strand. Although we have previously described peptides containing Hao and δOrn [JACS 2000, 122, 7654; JACS 2002, 124, 4972; JACS 2003, 125, 876], the present report represents the first examples of peptides containing Hao and δOrn that fold in aqueous solution. 1H NMR and other structural studies of Val-Tyr-Hao-Leu-Val-δOrn-Val-Leu-Lys-Ile-His-Ala-Leu-NH₂ and related β-hairpin peptides will be discussed.