Significance: With the growing range of applications of long-chain peptides, such as proteins, the development of appropriate analytical techniques is highly desirable. In 2000, Carlson and Beal prepared combinatorial libraries of acridine–peptide conjugates that could be helpful for the discovery of structure-specific nucleic acid ligands by affinity chromatography with mass spectrometry.

Comment: 9-Acridone-4-carboxylic acid was functionalized with aniline via a 9-triazolylacridine intermediate, and the product was used to synthesize acridine–peptide conjugates by solid-phase synthesis. The structures of the products could be determined from samples of less than 10 pmol by tandem mass spectrometry.