Project 2: Week 1
30. March, 2005

Synthesis and Characterization of a Amyloid-β Fibril-forming Peptide

A. For Wednesday (6. April, 2005)

1. Write a draft for the Introduction section for your report. Include in your discussion:
   a. A review of what is known about Alzheimer's disease.
   b. A review of what is known about Alzheimer β-amyloid peptides and fibril formation, with particular emphasis on the βAP(25-35) peptide.
      i. Use the Terzi et al. (1994) as a landmark article, and do a Science Citation Index search to the present.
   c. A description of solid-phase peptide synthesis using FMOOC chemistry for protecting the α-amino group and activation of the α-carboxyl group with HBTU.
      i. Compare and contrast solid-phase peptide synthesis to how peptides are synthesized by living cells.
      ii. Describe the Nobel Prize winning work that was done in the area of solid-phase peptide synthesis.


B. Also for next Wednesday (6. April, 2005)

1. Collect MSDS sheets for the reagents we will be using, including
   a. N,N-Dimethylformamide
   b. N-Methylmorpholine
   c. Pyridine
   d. FMOC-amino acids
   e. HBTU (0-Benzotriazole-N,N,N',N'-tetramethyl-uronium hexafluorophosphate.)
   f. HFIP (1,1,1,3,3,3-Hexafluoropropanol)