

## **Amyloid Aggregation: The Latest News**

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Amyloid formation is associated with many serious diseases, including Alzheimer's, Parkinson's and type 2 diabetes. In recent years it has been shown the proximate toxic agents. In these diseases is in the early oligomer states, not in the amyloid fibrils themselves. These states are very difficult to study since they come to rapid steady state and cannot be separately isolated. Consequently traditional spectroscopic methods, including x-ray crystallography, are not effective. For the past several years we have been applying ion mobility based mass spectroscopy (IMS-MS) methods to a number of these systems. In this talk I will give brief descriptions of the diseases and their impact on human health, a discussion of the methods we use and recent results on Alzheimer's (the Abeta peptide) and type 2 diabetes (the IAPP peptide) and potential drug candidates we are currently working on.