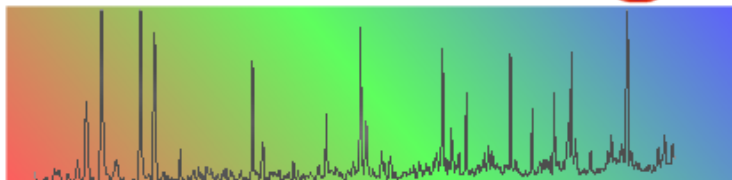




SAS-Chicago



Please visit our linked business cards on the [last page](#) of this flyer.

April Meeting

Tuesday, April 17, 2007

The April 2007 meeting will be held at the Wellington Restaurant, located at 2121 S Arlington Heights Rd, Arlington Heights, IL 60005. See the map on the following page.

Social Hour: 5:30 PM

Dinner: 6:30 PM

Election & Presentation: 7:30 PM

Analysis of Individual Submicron Particles and Applications to Protein Aggregation and Misfolding Diseases

by

Doug Gilman, Ph.D.

Louisiana State University

We are developing separation and optical detection methods to characterize and quantify individual submicron particles. The development of these techniques is inspired by the analytical challenges posed by research aimed at understanding the role of protein aggregation in disease. Protein self assembly to form large, ordered aggregates is an intriguing biochemical phenomenon, an important factor in a number of diseases, and a challenging problem for bioanalytical chemists. Recent research has shown that many structurally unrelated proteins will self assemble to form large, ordered aggregates called amyloid fibrils. This type of aggregation is linked to over 25 diseases including Alzheimer's disease, Parkinson's disease, Huntington's disease and prion diseases (e.g., mad cow disease). Our research is aimed at understanding the self-assembly of amyloid beta peptide (Ab), which plays a central role in Alzheimer's Disease. Ab amyloid fibrils are typically 10-12 nm in diameter and up to several micrometers in length. Even simple aggregation experiments using only Ab peptide in a test tube will result in a complex mixture of structures ranging from monomeric peptide to fully formed amyloid fibrils over a micrometer in length. Recent studies suggest that intermediate aggregates may be toxic to cells and important in Alzheimer's disease. Our research focuses on developing bioanalytical techniques that will allow us to characterize and quantify the diverse population of Ab peptide aggregates in solution. The methods under development in our group feature capillary electrophoretic separations and detection using absorbance, fluorescence and light scattering.

Please make your dinner reservations for the upcoming meeting by email at sas.chicago@bigfoot.com, by using the form on our web page < <http://www.sas-chicago.org/Online%20Registration%20at%20Wellington.htm> > or by calling Mary Kaplar at 708-449-5767. Leave your name, company affiliation, a telephone number, the number of reservations and your choice of entree. Please call by noon Friday, April 13th, so that proper arrangements can be made with the restaurant. If you can't attend, cancel by Friday noon: SAS is charged for no-shows.

Entree choices: London Broil with Bordelaise Sauce, Breast of Chicken with Teriyaki Sauce, or Vegetarian Fettuccine.

Dinner Cost Members: \$25

Students and Unemployed Members: \$10

Non-members: \$30

Biography of Dr. Doug Gilman

Doug Gilman is an Associate Professor at Louisiana State University in Baton Rouge, LA, where he has been a member of the Chemistry faculty since 2004. Doug obtained his B.S. degree in Chemistry at Harvey Mudd College in Claremont, CA in 1989. He obtained his Ph.D. degree in Chemistry in 1994 at the Pennsylvania State University under the direction of Andy Ewing. Doug was an NIH postdoctoral fellow from 1994-1997, working for Bruce Hammock in the Departments of Entomology and Environmental Toxicology at the University of California, Davis.

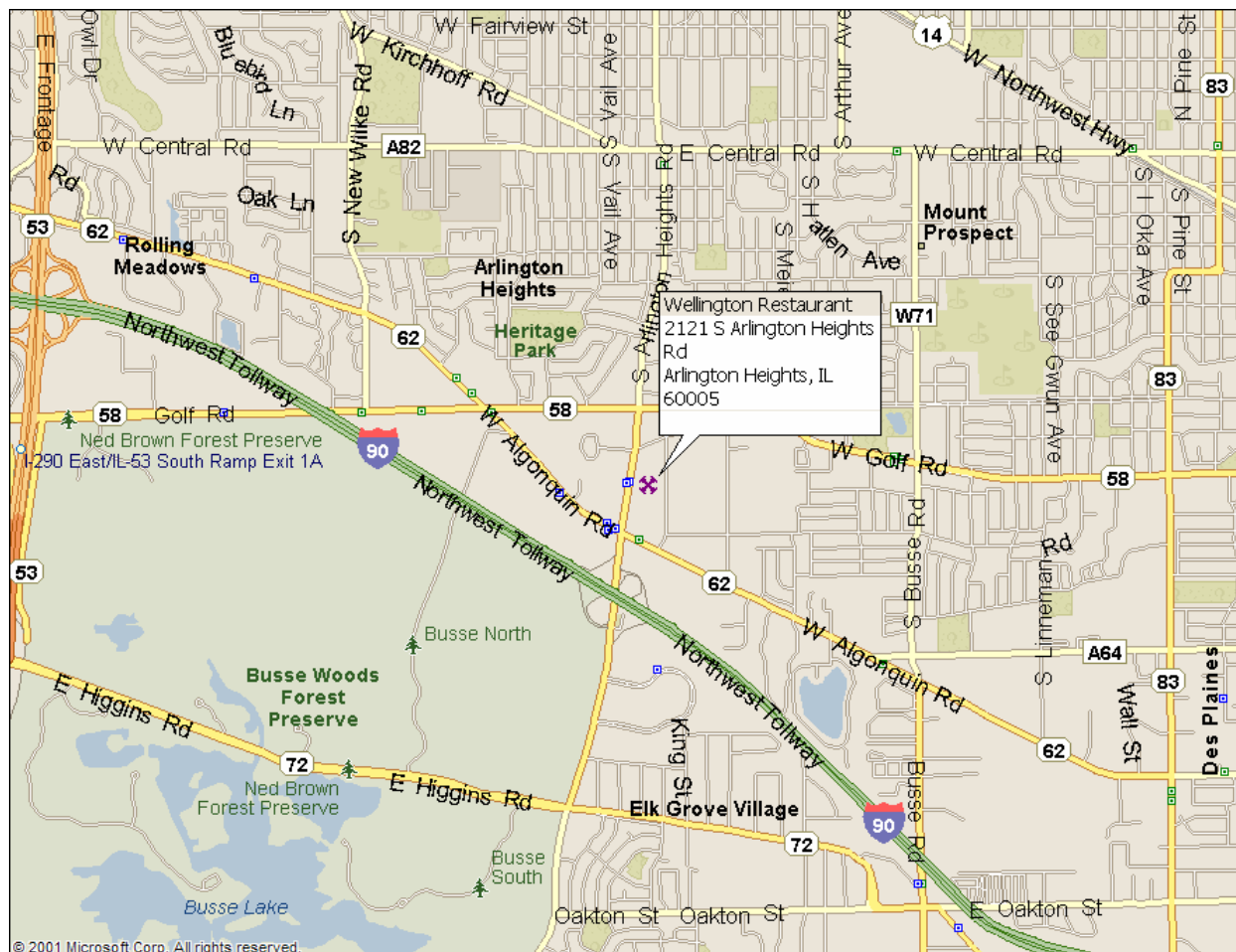
Doug started as an Assistant Professor of Chemistry at the University of Tennessee, and he was promoted to Associate Professor in 1993. He received an NSF CAREER Award in 2001, and he was Program Chair for FACSS in 2006 in Lake Buena Vista, FL. Doug is a member of the SAS, ACS and Sigma Xi. Doug's research program at LSU focuses on the development of new bioanalytical techniques to study enzyme inhibition and protein aggregation. He also studies electroosmotic flow dynamics in capillaries and microfluidic devices.

Doug's wife, Indu, is an Assistant Professor and Director of the Proteomics Facility at the Pennington Biomedical Research Center in Baton Rouge as well as a scientific collaborator. Their most successful collaborative project is two children, Rohin and Priya.

DIRECTIONS TO THE WELLINGTON RESTAURANT

From Chicago: Take Interstate 90 (Northwest Tollway) west to Arlington Heights Road exit. Proceed north to the restaurant.

From the southwest: Take 355 north to Route 53 north and exit at Algonquin Road east. Go to Arlington Heights Road. Turn left (north) and proceed to the restaurant.



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