



New Haven Section
VOLUME 21, NUMBER 4, November, 2004

November 16, 2004 – NEW HAVEN SECTION MEETING

Dr. Ya Ha, Yale School of Medicine

will present

**"How do cells control the conversion of APP to b-amyloid,
a small peptide causing Alzheimer's disease?"**

November Meeting Details

Biographies of Candidates for Section Offices

Ballot for 2005 Officers

New ACS Employment Program

Education Resources for Grades 3-8

November Meeting
Tuesday November 16, 2004
500 Blake Street

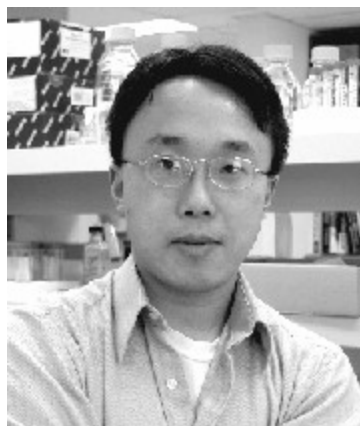
Dr. Ya Ha

will present

How do cells control the conversion of APP to β -amyloid, a small peptide causing Alzheimer's disease?

500 Blake Street Cafe
500 Blake Street
New Haven, CT
(203) 387-0500
Website: www.500blakestreetcafe.com

Dinner: 7:00 p.m.
Social Hour: 6:00 p.m.
Lecture: 8:00 p.m.



Abstract: Alzheimer's disease affects about one percent of the general population. Since mutations in APP (amyloid precursor protein) were found to be responsible for certain inherited forms of the disease, this protein has become the center of inquiries aiming at understanding the mechanism of the disease. One particular focus is the β -amyloid, a small peptide derived from APP, which becomes precipitated in the form of senile plaques at susceptible regions of the brain. Mutations in APP appear to increase the chance of such precipitation and, as indicated by *in vitro* studies, the amyloid peptide is toxic to

surrounding neurons. We currently try to understand how the conversion from APP to beta amyloid, a process that harmlessly occurs inside normal cells, is controlled and how this control becomes affected by mutations and by other factors. Our goal is to develop pharmacological approaches to reinforce this control in order to reduce amyloid load in brain tissues, both as a test and as a potential therapeutic application of the hypothesis that, by removing β -amyloid, Alzheimer's disease can be prevented, slowed, or even cured.

Brief Biographical Sketch: Dr. Ya Ha received his BS from Nanjing University in 1992 and his PhD from the University of Minnesota, Twin Cities Campus in 1998. After that he worked at Harvard University where he held a postdoctoral fellowship awarded by the Jane Coffin Childs Memorial Fund for Medical Research. He has now joined the staff of the Department of Pharmacology, Yale School of Medicine where he is an Assistant Professor. Dr. Ha received the 42nd Biophysical Society Annual Meeting graduate student travel grant in 1997 and the biochemistry graduate student travel grant in 1998. He currently has the Ellison Memorial Foundation New Scholar Award in aging, granted from 2002-2006. His research interests include the molecular

mechanism of aging, macromolecule structure and function and X-ray crystallography, where he has authored numerous papers. Dr. Ha is a member of the American Association for the Advancement of Science, the American Crystallographic Association and the Biophysical Society.

500 Blake Street Cafe – Tuesday November 16, 2004

Entrée choices: Stuffed Breast of Chicken, Sauce Supreme
Baked Scrod Livornese
Roasted Top Sirloin, Mushroom Sauce

Price: ACS Members/Guests \$25
Teachers/Retirees/Students \$22
Price includes tax and tip.

All entrees are served with appetizer of stuffed shells, 500 Blake Street House Salad with House Dressing, Chef's Choice of two vegetables and potato, and dessert of warm Apple Crumb a la mode with coffee, tea or decaf.

Please make your reservation by contacting **Ning Su by Monday morning November 15, 2004**, at (203) 812-3928 or e-mail to: ning.su.b@bayer.com. Please leave your name, telephone number, dinner choice and number of reservations desired. Cancellations must be made 24 hours prior to the meeting or you may be charged for dinner.

You may also attend the lecture without the dinner. Please notify Mr. Su so he can keep the

Directions to 500 Blake Street Cafe

From Route 91 - TAKE DOWNTOWN NEW HAVEN EXIT 1 (Route 34), (*) follow to end of expressway onto North Frontage Road to end. Turn right onto Ella Grasso Boulevard (Route 10). Follow for approximately one mile. Turn left onto Whalley Avenue for ~0.8 miles and turn right onto Blake Street. (1/2 block before the Hallock's Furniture Store building). 500 Blake Street Cafe will be on your right.

From Route 95 - TAKE DOWNTOWN NEW HAVEN EXIT 47 (Route 34). Starting with (*) continue with above directions.

From Wilbur Cross Parkway - TAKE EXIT 59, turn right at end of exit and follow onto Whalley Avenue to Westville Village, approximately 1.3 miles. Turn left onto Blake Street (1/2 block past the Hallock's Furniture Store Building). 500 Blake Street Cafe will be on your right.

From Rt. 63 South – Continue south for approximately mile past the junction of Rt. 63 and Rt. 69. Turn left onto Blake Street (1/2 block past the Hallock's Furniture Store Building). 500 Blake Street Cafe will be on your right.

The Ad Guidelines are as follows: Situations-wanted by New Haven Section member - **No Charge**. Non-members **\$20 for four lines**. Want Ads are **\$40 for a 4-line ad** or **\$75 for a full-page (4 x 8 inch)**.

Kilometers are shorter than miles.

Save gas, take your next trip in kilometers. -George Carlin

New Program Aims to Help Mature Chemists

ACS industrial members age 45 and over who have lost their jobs, or have been given notice that they will become unemployed by December 31, are eligible for a pilot program that aims to assist them to return to work.

Five mid- and late-career members will receive financial subsidies to receive professional career coaching and to participate in the Chemjobs Career Center at the Spring 2005 National Meeting in San Diego. The new program, "Member Career Outreach," was launched this fall by the ACS Department of Career Services with the support of Corporation Associates.

Data show that mature chemists (age 45+) face very different challenges in securing employment than younger chemists. Not only are older workers more likely to be unemployed and to experience lengthy periods of unemployment, but they also may lack recent experience in looking for a job, face greater family and financial responsibilities than younger candidates, have outdated skills, bring unrealistic expectations to the job search, and suffer age discrimination.

According to data from the 2004 ACS Comprehensive Salary and Employment Status Survey, the unemployment rate is positively correlated with age. Not only is the unemployment rate higher for older chemists, but chemists over the age of 45 are likely to experience a lengthier period of unemployment than younger chemists. According to the latest survey, as of March 1, 2004, 38.5 percent of the unemployed age 45+ had been unemployed for a year or more, while only 17 percent of those under age 45 were unemployed for a long period.

The "Member Career Outreach" program will help grantees in four essential ways

- * It will provide financial support to receive professional career coaching, purchased online and delivered via telephone and e-mail. This personal, one-on-one assistance can help members refine their job-search strategy.
- * It covers travel expenses to attend the Spring 2005 National Meeting in San Diego. This will enable grantees to participate in Chemjobs Career Center, including taking interviews with prospective employers and attending workshops and technical sessions.
- * A reception for mid- and late-career job seekers and selected employers will be held at the San Diego National Meeting. This will afford grantees an opportunity to interact informally with other chemists, including prospective employers. Networking is known to be one of the main mechanisms by which job seekers learn of job opportunities and eventually secure positions.
- * Each participant will receive a career transition workbook developed by the Department of Career Services. The workbook will guide ACS members through the stages of the career transition process as well as provide a record-keeping system for tracking the progress of their job search.

After advertising "Member Career Outreach" in C&E News, DCS will select awardees by a combination of lottery and evaluation of their application materials with the assistance of the Subcommittee on Professional Services of the Committee on Economic and Professional Affairs (CEPA). (CEPA reviews ACS career programs and services.) Those selected for the program will be notified in early January.

To apply for the program or for further information, contact *Elaine Diggs* at e_diggs@acs.org

New Resources Combine Inquiry and Physical Science for Grades 3-8

Elementary school teachers are responsible for teaching math, English, social studies, science and sometimes more. They need to closely monitor the early stages of learning in all these subjects and provide individual attention to students when possible while navigating all the class management, parental and school-wide issues that arise on a daily basis. Many of these teachers receive extensive training in math and English methods as pre-service teachers and continuing professional development in these areas as in-service teachers. Often, their exposure to science content and methods courses, particularly in physical science, and to professional development in science is not as thorough.

An added challenge for teachers is the expectation that students learn science through active involvement in investigating objects, materials, and substances. This hands-on, inquiry-based approach to teaching science requires a comfort level with experimental design and with physical science content. But with a somewhat limited background in physical science, and the pressures to teach all other subjects, elementary teachers find it difficult to develop and practice these types of science activities that will engage their students and teach basic physical science principles. Often these teachers have support through textbooks and kit-based programs but these products rarely can give teachers the background knowledge and experience in experimental design that they need to confidently teach physical science concepts in an inquiry-based way. Although middle school teachers usually have taken more pre-service science classes than most elementary teachers, they can also benefit from help incorporating and practicing a more inquiry-based teaching approach to their science lessons.

The K-8 Science Office has developed a set of products and programs which offer science content and practice developing an inquiry-based approach to teaching the chemistry-related physical science standards from the *National Science Education Standards*

Inquiry in Action Investigating Matter through Inquiry, 2nd Edition became available in the first week of September, 2004. The book was developed by the K-8 Science Office to offer not only science investigations in basic chemistry topics, but detailed guidance in a guided-inquiry approach to the investigations.

The *Inquiry in Action Investigation Pack* is for teachers without science equipment such as reusable droppers, magnifying glasses, graduated cylinders, and thermometers.

The *Chemistry through Inquiry* online course is a 5-week course based on the investigations in *Inquiry in Action*. The course focuses on developing in teachers the ability to integrate the teaching of inquiry skills and physical science content.

The professional development workshop, *Inquiry Matters Incorporating Inquiry into Elementary and Middle School Physical Science*, is an in-person workshop presented by K-8 Science Office staff. The workshop is also based on *Inquiry in Action* and has teachers working in groups to learn and practice some of the activities in *Inquiry in Action* while presenters model and encourage a guided inquiry-based teaching style.

For more information, visit www.chemistry.org/acs/ and go to 'educators and students', then to 'ACS Education Division Homepage'.



National Chemistry Week was celebrated October 17-23 with the topic Health and Wellness. A poster contest is being held for grades K-12. A scientific contest is being held for the grammar school involving sugar in sodas and the high school topic involves calories. The deadline for entries is December 31, 2004. Information is being sent to each school in New Haven County. If you would like more information on entering the contests please contact **Caroline Maselli** at (860)567-4719 or by e-mail at caremike@snet.net.

~~BALLOT~~

~~New Haven Section~~

~~American Chemical Society~~

~~Officers for 2005~~

~~Program Chair~~ ~~Dennis J. Jakiela~~

~~Treasurer~~ ~~Caroline Maselli~~

~~Alt. Councilor~~ ~~Gerald Putterman~~

~~Mail to:~~ ~~Ms. Jennifer Burke~~

~~Bayer Healthcare Pharmaceuticals~~

~~400 Morgan Lane, Bldg. B27~~

~~West Haven, CT 06516-4140~~

~~or~~

~~e-mail to:~~ ~~jennifer.burke.b@bayer.com~~

~~Mail in ballots must be postmarked November 30, 2004.~~

e-Mail ballots must be received by midnight November 30, 2004

Election of New Officers for 2005 - Nominees

It is once again time to choose the officers who will lead the Section in 2005. The three positions open for 2005 are Program Chair, Alternate Councilor and Treasurer. The Program Chair sets up the meeting schedule for the year and becomes the Section Chair in the following year. The Alternate Councilor represents the Section in legislative actions of the national ACS in the event one or both Councilors are unable to attend the National meeting. Alternate Councilor is a three-year position. The Treasurer is responsible for Section finances. He/she collects the dinner fees at meeting, pays bills incurred by the Section and keeps account of dues received from the National ACS. All officers are members of the Section's Executive Committee which determines the course your Local Section takes in the near future.

A short biography of the nominee for each office is presented below.

Dennis J. Jakiela - Program Chair

Dennis holds a B.A. degree in Chemistry from Wesleyan University and a Ph.D. in Organic Chemistry from S.U.N.Y. at Stony Brook. He has 19 years of industrial research and development experience. After working briefly at Uniroyal Chemical and then at Sunoco Chemicals, he joined American Cyanamid (now Cytec Industries) in 1989. His work there focused mainly on UV stabilizer technology in support of Cytec's polymer additives business. He currently works on dyes, photo-initiators, ionic liquids, acrylate monomers, and UV absorbers at Hamford Research in Stratford.

Caroline Maselli - Treasurer

Caroline has been a member of ACS since 1989. She has a BA in Chemistry and Biology from Skidmore College and will receive her MBA in July 2005. Caroline has been co-chair of National Chemistry Week since 1991 and was Section secretary 1990-1992. She has been employed by Crompton Corporation for more than 15 years and currently is a Regulatory Affairs Analyst.

Gerald Putterman - Alternate Councilor

Gerald J. Putterman has been a member of the New Haven Section for the past 20 years and has served the Section as Councilor and Chair of the Nominating Committee. Jerry received an A.B. in chemistry from the Johns Hopkins University and a Ph.D. in biochemistry from Yale University. During this 20 year period Jerry conducted research at Yale Medical School, served as the Program Officer for Sigma Xi (when that honor society's headquarters were in New Haven) and was responsible for plant and animal metabolism studies conducted by Crompton Corporation (formerly Uniroyal Chemical Company).

Options -- We have only one candidate for each available office this year. In order to save you time and a stamp, we are allowing voting by e-mail. If you choose this option, include your name and "ACS" in the subject line. This will keep your response from inadvertently being treated as junk-mail or spam.