Alumni Mailbag

Don H. Smith '34 BS. Next Issue:(?) List(s) of: (1) Former beneficiaries of Torrey Fund & their present duties. (2) Present beneficiaries of Torrey Fund & their future plans. (3) $$$ Condition of the Torrey Fund.
Eds: The Ray Ethan Torrey Scholarship Fund is alive and well. Each year 6-7 undergraduates are provided $500 in support of plant biology research. The Plant Biology Program administers the scholarship and has its own newsletter.

Harold S. Lewis '43 BS. I enjoy your Newsletter! You mentioned Frank Wing '40. Do you have his address? ... an old friend of mine.
Ed: Frank Wing, 5431 Granada Blvd, Sebring, FL 33872

David Marsden '43 BS. Dr. David H. Marsden died Dec. 26, 1999.

Vicky Haard '65 BS. Working part time at "The Naturalist" in Davis CA, enjoying 4 grandchildren, volunteering for Gideons and working on my Private Pilot certification.

Clare (Schloemer) Neuman '66 BS & '68 MAT. I am retired now (2 years) after a 30 year career as a biology teacher.

Mary A. Anderson, '68 BS. Captain Mary Alice (Buck) Anderson, Medical Corps, USN assumed command of the Naval Aerospace Medical Research Laboratory on 5 August 2000. The mission of the laboratory is to conduct research and development in aviation medicine and the allied sciences. Night vision studies, spatial disorientation work, and sound attenuation research are current projects.
Eds: Go Buck!

Neil Fennessey BS '75 Zool. I am a professor of civil & environmental engineering at UMass Dartmouth. Specialty area is hydrology and water resource planning and management. My Zoology training helps me communicate with the biology-types but the world is better off that I am not one of them. I still have a passion for auto racing ... shared with my advisor, Dr. Klingener.

John Storella '80 MS I left my position at the law firm in April 2000 and joined Ciphergen Biosystems. We are a proteomics company determined to revolutionize the field of protein biology with a patented SELDI mass spectrometry system. ... We fractionate proteins using a biochromatographic surface, and analyze the captured proteins by mass spectrometry. ... One practical application of the technology is the discovery of diagnostic markers by comparing the proteins from healthy and diseased biological samples. ... On a more personal note, my wife, Lisa, ... is a television producer. Next week she has two pieces airing ... follow-up programs produced by KQED to the Moyer's series on PBS on end of life issues. John

Brian Bettencourt '96 BS I successfully defended my PhD dissertation at U. Chicago. ...

(see all the alumni mail, unexpurgated, at URL: www.bio.umass.edu/biology/alumni/links/alum_response.html)

Keep in touch using the various avenues provided:

- Jot down your comments on the enclosed card or letter and send them to:
  Biology Alumnus Newsletter
  Biology Department
  University of Massachusetts
  Amherst MA 01003-5810
- Use the electronic route via the Biology Alumni Forum where you can leave Email messages for all participating Biology alumni.

The BioMass Staff

Pumping Iron

All plants require iron for normal growth and development. When sufficient quantities of iron are not available, symptoms of iron-deficiency develop.
Due to its poor solubility, iron is present in soil water in extremely low concentrations. In response to the paucity of available iron in soil water, several mechanisms for its uptake have evolved. One of these mechanisms, chelation, is operative in the grasses, the group of flowering plants that includes important agricultural crops such as corn, wheat, and rice. Grass roots secrete compounds called phytosiderophores which chelate iron ions present in soil water. **Dr. Elsbeth Walker** and her research team have cloned the *yellow stripe 1* (*ys 1*) gene and shown that the product of chelation, the phytosiderophore-iron complex, is moved across the plasma membrane of corn root cells by the protein Yellow Stripe 1 (YS 1). This study appeared in a recent issue of the journal *Nature*.

The cloning of *ys 1* is a significant advance in the elucidation of the mechanism by which grasses acquire and distribute iron. An understanding of iron uptake may permit the engineering of iron-rich crop plants that could play an important role in alleviating iron deficiency anemia which afflicts three billion people worldwide. Since the iron phytosiderophore chelates ions other than iron, plants into which *ys 1* has been inserted might prove useful for the removal of metal ions from contaminated soils.

Alumni Help on Faculty Timeline

Postcards returned by alumni often contain queries about professors or instructors with whom we have lost touch over the years. Our alumni could help the Biology Department by answering some of the Alumni Mailbag queries. We, on campus, are focusing on the present and future and have lost track of when particular professors were on campus as Biology, Zoology or Botany faculty. We are going to try to reconstruct the historical timeline of faculty residence on campus by sending a postcard questionnaire to you, our alumni.
This could be fun and of interest to our alumni and our current faculty. Help us turn this accompanying random tree of some of our present and past faculty into a tree rooted in our memorable past! Please indicate on the accompanying postcard the years when you were on campus and your most memorable courses and professors who you think belong on the tree. Using this data we will construct a timeline and publish it in the next BioMass. The timeline may jog the memories of other alumni and lead to more information and Alumni Mailbag queries. Do not hesitate to use Email to speed up the information gathering process (alumni_forum@bio.umass.edu).