



The Arizona Science Teacher
Advancement and Research Training Program

MEMORANDUM

DATE: February 18, 2008

TO: Life Sciences Researchers in Arizona

FROM: Lisa Elfring, Biochemistry and Molecular Biophysics, University of Arizona

RE: Researchers needed to mentor *AZ-START* teacher interns in Summer 2008

It is my great pleasure to announce that a grant from Science Foundation Arizona will allow personnel in the Arizona life science industry to coordinate efforts and provide **summer research internships for Arizona middle- and high-school teachers**. *AZ-START (Arizona Science Teacher Advancement and Research Training)* is a collaboration between researchers at the three state universities, the state's agricultural research stations, and state life science industry. Our goal is to provide life science teachers throughout the state with opportunities to participate in authentic research and to use their research experiences to enhance their classroom teaching.

You are probably aware of the critical issues facing science education in our state: low performance on state-to-state comparisons of students' science skills; low expenditures per student; high student: teacher ratios. An additional problem facing life science teachers is the extremely rapid rate of change in our understanding of biology. Great teachers create opportunities for students to learn that biology is more than a collection of facts, but an active and evolving set of approaches used to ask questions about the living world. A recent report from the National Science Board emphasizes the critical importance of sustained programs of professional development for science and mathematics teachers. We believe that this research program will be one important part of such a program for Arizona teachers.

Our first summer research program will take place beginning in June, 2008. **Approximately 20 teachers will be selected to work for 7-8 weeks over the summer and will receive financial compensation for their participation in research (paid via our AZ-START grant)**. After a week of orientation, safety training, and training in common laboratory techniques, teachers will work with research mentors in any area of biology for the remaining 7 weeks. **We are particularly hoping to attract teachers from rural areas of Arizona by offering them an opportunity to engage in a research experience at a education institution or Agricultural Research Station located conveniently close to their homes.** Weekly discussions (in person or via technology) with our staff will provide opportunities to discuss how what they are doing in research will impact their teaching practice.

We are looking for research mentors at institutions and companies throughout Arizona who can provide opportunities for teachers to experience the excitement of biological research.

If you would consider mentoring one or more teachers in your research group, please take about 10 minutes to fill the online form at <http://www.biochem.arizona.edu/AZSTART/forms/submit.htm>, which will put your information into our research database. Your User ID is: [azstart](#) and your password is: [teachers](#)

Once we have received this information, applicants for the Summer 2008 program can use the database to search for potential mentors who would be a good match with their interests and geographical location. We will work with both teachers and mentors to make sure there is a common set of expectations for this experience.

If you have questions about the program, please contact me (elfring@email.arizona.edu) or co-PIs Nadja Anderson (nadja@email.arizona.edu) and Tom Baldwin (tbaldwin@email.arizona.edu). We would be pleased to talk with you. We also have a FAQ page <http://www.biochem.arizona.edu/AZSTART/internshipFAQs.htm> on our website, which helps explain the internship program to potential applicants that you might find informative. Thank you for your efforts to support education in Arizona!