The Scripps Research Institute to Host Winner of Prestigious Summer Teacher Research Fellowship

La Jolla, CA., April 5, 1993 -- The Scripps Research Institute (TSRI) has been selected by the American Society for Cell Biology (ASCB) as the only institution in San Diego to host a recipient of the prestigious Summer Teacher Research Fellowship Award.

One of 25 fellowship awardees nationwide, Rachel Tenenbaum, an eighth grade science teacher at Marston Middle School in the Clairemont area of San Diego, will spend ten weeks this summer in the laboratory of Velia Fowler, Ph.D., an assistant member of the Department of Cell Biology at TSRI.

This is the fourth consecutive summer that the ASCB has sponsored the highly competitive summer research teacher fellowship program. Its goals are to provide teachers with the opportunity to develop experimentation skills, build a network with community scientists, enhance self-confidence in experimentation, and bring the excitement of science into the classroom.

MORE
"This country can maintain its unparalleled leadership in the basic sciences by providing young students with the very best educational opportunities and by bringing scientific innovation and inquiry into the classroom," says Norton B. Gilula, Ph.D., Chairman of The Scripps Research Institute’s Department of Cell Biology and Dean of Graduate Studies. "We are proud to contribute to this goal by hosting an outstanding science teacher who will pass on her knowledge and experience not only to her students but to her colleagues throughout San Diego."

Tenenbaum will receive a $4000 stipend as well as funding to attend the National Association of Biology Teachers (NABT) Convention this November in Boston. To qualify for the coveted fellowship, she and the other recipients were judged in a variety of categories: the proposed research and the quality of planned interactions for the teacher, the intended relationship between the teacher and sponsoring laboratory in the future, the qualifications of the researcher and teacher, the level of commitment demonstrated by the teacher’s school, and the potential impact on women, minorities and low-income individuals.

Tenenbaum will participate in Dr. Fowler’s work in the characterization of tropomodulin localization relative to other sarcomeric proteins during skeletal muscle differentiation in vitro. A novel tropomyosin-binding protein originally isolated from human erythrocytes by Fowler, tropomodulin is a candidate to regulate actin filament

MORE
length at the pointed end. The length and spatial organization of actin filaments in the sarcomeres (contractile units) of skeletal muscle are precisely regulated and are essential for productive contraction and movement.

According to Fowler, "Ms. Tenenbaum will contribute to this project by learning the technique of immunofluorescence microscopy, one of the major foundations for much of our knowledge concerning localization and function of subcellular components. She will learn what can be inferred about function from these sorts of experiments as well as their limitations. She will gain a greater understanding of the molecular architecture and function of skeletal muscle. The subcellular organization of skeletal muscle can be used in teaching as an example of how molecules generate structures that are designed for specific physiological functions. She will be able to apply this knowledge directly to the teaching of eighth grade physiology."

"This award will help me meet the challenges of engaging my students by engaging me," says Tenenbaum. "It will help me bridge the gap between science in the classroom and science in the real world. I can show students firsthand that they can make a difference. I can also bring into the classroom a whole new wealth of expertise, in the form of research and researchers from one of the finest facilities in the country."

Dr. Michelle Marcus, Principal at Marston Middle School, echoed Tenenbaum’s enthusiasm for the program and endorsed her qualifications as a fellowship recipient.
"Ms. Tenenbaum has earned the respect of her students and colleagues because of her high expectations for students," she says. "Her number one classroom priority has been to involve students in hands-on experiments so that students learn to enjoy science. She has already developed science lessons to share with sixth grade teachers to improve integration of science in the core curriculum. We anticipate that this program will enhance her skills and knowledge for her resource role."

Among the research centers hosting the fellowship winners are such prominent institutions as Georgetown Medical Center, Washington, D.C.; Columbia University College of Physicians and Surgeons, New York, N.Y.; Vanderbilt University, Nashville, Tenn.; Brown University, Providence, R.I.; and Haverford College, Haverford, Penn.

The ASCB fellowship recipients were selected from a field of 77 applicants throughout the United States. According to Robert Bloodgood, Ph.D., Chairman of the ASCB Education Committee, a critical component of the program is the subsequent follow-up activities that will allow teachers to translate their research into improved science laboratory opportunities for their students. These include the development of new curriculum approaches and laboratory exercises, and the provisions for in-service activities for other science teachers.

###