

Report of the Committee on Awards for the Year Ending June 30, 1999

The Committee on Awards met on Thursday, 12 November 1998 during Sigma Xi's 1998 Forum and Annual Meeting in Vancouver, British Columbia.

The William Procter Prize

During its meeting in Vancouver, the Committee reviewed a list of excellent nominations for the William Procter Prize for Scientific Achievement. The Committee recommended, and the Board of Directors subsequently approved, that Dr. Lynn Margulis, Distinguished University Professor at the University of Massachusetts, Amherst, be awarded the 1999 William Procter Prize for Scientific Achievement. Dr. Margulis agreed to accept the 1999 Procter Prize at Sigma Xi's 1999 Forum and Annual Meeting in Minneapolis and to deliver the Procter Prize Address under the tentative title, "Symbiogenesis."

Dr. Margulis played a major role in introducing the "serial endosymbiosis theory" which posited that cells with nuclei (eukaryotic cells) evolved through symbiotic relationships with other cell types. It is now widely accepted that such cell components as mitochondria and chloroplasts were once separate organisms; bacteria that over the course of evolution were incorporated into the make-up of modern eukaryotic cells. Dr. Margulis is also widely known as an energetic popularizer of science, spokesperson for environmental issues, author of many books on a wide variety of scientific topics, contributor to popular magazines and educational journals, and the producer of several videos.

Each year the Procter Prize recipient has the privilege of naming a younger colleague to receive a \$5,000 grant-in-aid of research from the Procter Prize Fund. This year, Dr. Margulis has nominated Mr. Andrew Wier of the Department of Geosciences at the University of Massachusetts Amherst to receive this award. Mr. Wier has expressed his willingness to attend the November 1999 Forum and Annual Meeting to receive his grant-in-aid of research award during the Society's annual banquet.

Honorary Members

At its November 1998 meeting, the Committee on Awards recommended, and the Board of Directors subsequently approved, that Ms. Joann Rodgers and Mr. Brian Hayes become Honorary Members of Sigma Xi. Ms. Rodgers became Deputy Director of Public Affairs and Director of Media Relations at the Johns Hopkins Medical Institutions in 1984 after 18 years as an award-winning journalist and columnist for the Hearst newspapers. Mr. Hayes has had a distinguished career as a science writer and editor and also performed an invaluable service to Sigma Xi as 1990-92 editor of *American Scientist* by overseeing the transition of the magazine from New Haven, Connecticut to the Society's new offices in Research Triangle Park, North Carolina. His regular "Computing Science" column continues to be a popular feature of the magazine.

Both Ms. Rodgers and Mr. Hays have indicated that they will be in attendance at the November 1999 Forum and Annual Meeting in Minneapolis to be initiated as Honorary Members of the Society. In addition, Mr. Maurice Strong, elected to Honorary Membership in 1998, will attend the 1999 Forum and Annual Meeting to be initiated as an Honorary Member of Sigma Xi. Mr. Strong, recognized worldwide for his activities towards securing a global plan for sustainable development of humans and the environment, was unable to attend the 1998 Forum and Annual Meeting in Vancouver, where he was to be initiated as an Honorary Member of the Society.

Young Investigator Award

Also during its November 1998 meeting, the Committee recommended that Dr. Laura Landweber, Assistant Professor of Biology in the Department of Ecology & Evolutionary Biology at Princeton University, be awarded the first Young Investigator Award in the fields of the life and social sciences. The Board of Directors subsequently approved this recommendation and Dr. Landweber has agreed to participate in the 1999 Forum and Annual Meeting to accept her award and to present a lecture on her research under the tentative title, "Computing with DNA and RNA." Dr. Landweber's laboratory combines two approaches – comparative sequence analysis and functional *in vitro* selection experiments – to study early molecular evolution, the origins of genetic systems, and how cells and DNA process information. Dr. Landweber also is Vice President of the Princeton Chapter of Sigma Xi, has been a panelist on NPR radio, and has participated in summer workshops for science teachers.

Regional winners of the 1999 Young Investigator Award were recognized with Certificates of Recognition for their accomplishments. The 1999 regional winners were: Dr. David Arnosti (North Central Region); Dr. Mohamed A. F. Noor (Northeast Region); Dr. Lee Alan Dugatkin (Southeast Region); and Dr. Todd A. Anderson (Southwest Region).

Established by the Board of Directors in 1996, the Young Investigator Award recognizes the work of outstanding young Sigma Xi members within ten years of their highest earned degree as well as the ability to communicate their research to the general public. The Award alternates between the physical sciences and engineering and the life and social sciences. The Award includes a Certificate of Recognition, \$5,000, and the opportunity for the recipient to present their research during a lecture at the Society's Annual Meeting.

International Science and Engineering Fair

On 4-7 May 1999, Sigma Xi continued its participation in the International Science and Engineering Fair, which this year was held in Philadelphia. Participating in the "Special Awards" category, Sigma Xi awarded three prizes for the best interdisciplinary team projects at the Fair. Each team received a cash prize, and each team member

received a Certificate of Recognition and a one-year subscription to American Scientist; the winners school library also received a one-year subscription to the magazine.

The first place award of \$900 was made to a team of three students from Argentina who developed systems to provide electricity and running water, using renewable energy resources, to villagers previously without access to these basic services. A second place award of \$600 was presented to two Canadians who developed an autonomous plankton net efficiency monitor. The third place award of \$300 was given to three students from Indonesia for their work on finding and comparatively testing an alternative native plant species to replace an imported, expensive sacking material woven from a Chinese plant.

A team of 13 judges from two Philadelphia area Sigma Xi chapters (Academy of Natural Sciences and Temple University) evaluated 167 team projects at the Fair for the Sigma Xi awards; Dr. Dominique Dagit, President of the Academy of Natural Sciences Chapter, served as Chair of the Sigma Xi judging team. The Committee would like to express its gratitude to Dr. Dagit and all of the Sigma Xi judges for their efforts in assisting the Society's participation in the 50th International Science and Engineering Fair.

Monie A. Ferst Award

Dr. Arthur W. Adamson was selected to be the recipient of the 1999 Monie A. Ferst award. An inorganic and physical chemist, Dr. Adamson has received numerous awards for his work on adsorption on solids, and photochemistry and photophysics of coordination compounds. For example, he is a past recipient of the Kendall Award in Surface or Colloid Chemistry of the American Chemical Society (1979), and the ACS award for Distinguished Service in the Advancement of Inorganic Chemistry (1982). In 1993, the ACS inaugurated and named an award for him: "The Arthur W. Adamson Award for Distinguished Services in the Advancement of Surface Chemistry."

Dr. Adamson's contributions to teaching and mentoring are manifold. He is an author of popular textbooks on surface chemistry and physical chemistry, and was acknowledged for his educational leadership with the ACS award in chemical education (1984).

Sigma Xi Awards

Details for all Sigma Xi awards can be found on the Sigma Xi web site or from local Sigma Xi chapters.

Nominations for Sigma Xi awards are welcomed by the Committee on Awards and can be forwarded to the Committee at the Society's headquarters. Dr. Evan Ferguson can be contacted at the Society's headquarters for additional information about Sigma Xi's awards.

The members of the Committee on Awards for the year ending 30 June 1999 were:

Elizabeth L. Ambos, Chair
Jaleh Daie
Lynn O. Lewis
W. Franklin Gilmore
Virginia L. Trimble
Robert Zand