

one of twelve Americans selected as an inaugural George J. Mitchell Scholar.

Erin was selected from more than 250 applicants in a nationwide competition to pursue one year of post-graduate study at a university in Ireland or Northern Ireland. The scholarship is named in honor of former Senator George Mitchell's contribution to the Northern Ireland peace process and is awarded to individuals who have shown academic distinction, commitment to service and potential for leadership. Indeed, Erin has rose to the occasion. Erin will graduate in May with a degree in International Affairs from the University of Colorado. She is a Dean's Scholar, recipient of a service learning scholarship and member of numerous honor societies.

Erin spent a year as a volunteer for AmeriCorps, where she completed 1800 hours of service in the areas of education, environment, and public safety. While tutoring first and second grade students in San Diego, CA, Erin also assisted the school district in assessing the needs and conditions of primary and secondary schools. Additionally, after becoming a certified wildland firefighter, she helped develop a community education project with the Flagstaff Fire Department in Flagstaff, AZ and provided disaster relief to residents in Lama, NM following a forest fire.

As an intern for the Youth Volunteer Corps in Santa Rosa, CA, Erin designed an educational seminar to teach seventh grade students about the subject of child labor. She then led a group of students through the organization and completion of a school supplies drive for their peers in the Philippines. Recently, Erin returned from Geneva, Switzerland where she was an intern at the International Peace Bureau and The Hague Appeal for Peace.

As a George J. Mitchell Scholar, Erin will be enrolled at the University of Limerick for a master's degree in Peace and Development Studies. Her long-term goal is to pursue a career in which she can facilitate collaborative approaches to peacebuilding.

Mr. Speaker, for the past year we have heard so much about how our young people are being led astray and turning to violence. However, from my visits with young people in my district, I have seen how they are showing great promise for our nation's future. Erin Breeze is one of those promising individuals who is making a difference both in her local community and the global community. Because of her unswerving dedication and talent, I have no doubt that Erin will be a future world leader for peace.

NATIONAL BIOTECHNOLOGY  
MONTH

**HON. JAMES C. GREENWOOD**

OF PENNSYLVANIA

IN THE HOUSE OF REPRESENTATIVES

*Monday, January 31, 2000*

Mr. GREENWOOD. Mr. Speaker, I rise today on behalf of myself and Representative CLIFF STEARNS to recognize January 2000 as National Biotechnology Month.

It is fitting that in the first month of this new year, at the start of a new century, we look to

biotechnology as our greatest hope for the future.

Mapping the human genome, for example, is ahead of schedule and nearly complete. That achievement, begun 10 years ago, will rank as one of the most significant advances in health care by accelerating the biotechnology industry's discovery of new therapies and cures for our most life-threatening diseases.

Biotechnology not only is using genetic research to create new medicines, but also to improve agriculture, industrial manufacturing and environmental management.

The United States leads the world in biotechnology innovation. There are approximately 1,300 biotech companies in the United States, employing more than 150,000 people. The industry spent nearly \$10 billion on research and development in 1998. Although revenues totaled \$18.4 billion, the industry recorded a net loss of \$5 billion because of the expensive nature of drug development.

In 1999, the U.S. Food and Drug Administration (FDA) approved more than 20 biotechnology drugs, vaccines and new indications for existing medicines, pushing the number of marketed biotech drugs and vaccines to more than 90. Total FDA biotech approvals from 1982 through 1999 reach more than 140 when adding clearances for new indications of existing medicines. The vast majority of new biotech drugs were approved in the second half of the 1990s, demonstrating the biotechnology industry's surging proficiency at finding new medicines to treat our most life-threatening illnesses.

Biotechnology is revolutionizing every facet of medicine from diagnosis to treatment of all diseases. It is detailing life at the molecular level and someday will take much of the guesswork out of disease management and treatment. The implications for health care are as great as any milestone in medical history. We expect to see great strides early in this century.

A devastating disease that has stolen many of our loved ones, neighbors and friends is cancer. Biotechnology already has made significant strides in battling certain cancers. This is only the beginning.

The first biotechnology cancer medicines have been used with surgery, chemotherapy and radiation to enhance their effectiveness, lessen adverse effects and reduce chances of cancer recurrence.

Newer biotech cancer drugs target the underlying molecular causes of the disease. Biotech cancer treatments under development, such as vaccines that prevent abnormal cell growth, may make traditional treatments obsolete. In addition, gene therapy is being studied as a way to battle cancer by starving tumor cells to death.

Many biotech drugs are designed to treat our most devastating and intractable illnesses. In many cases these medicines are the first ever therapies for those diseases. For example, advancements in research have yielded first-of-a-kind drugs to treat multiple sclerosis and rheumatoid arthritis as well as cancer.

Other medicines in clinical trials block the start of the molecular cascade that triggers inflammation's tissue damaging effects in numerous disease states. In diseases, such as

Alzheimer's, Parkinson's and Huntington's, clinical trials are under way to test a variety of cell therapies that generate healthy neurons to replace deteriorated ones. Recent breakthroughs in stem cell research have prompted experts to predict cures within 10 years for some diseases, such as Type I (Juvenile) Diabetes and Parkinson's.

With more than 350 biotechnology medicines in late-stage clinical trials for illnesses, such as heart ailments, cancer, neurological diseases and infections, biotechnology innovation will be the foundation not only for improving our health and quality of life, but also lowering health care costs.

In the past two years Congress has increased funding for the National Institutes of Health's basic research programs by 15 percent per year. We are 40 percent of the way toward doubling the NIH budget. Health-care research, however, is not one-sided. The public funds we provide are for basic research. The private sector takes this basic science and then spends many times more than what the government has contributed to create new drugs and get them to patients. In today's world, biotechnology companies are among the greatest innovators and risk takers.

Biotechnology also is being used to improve agriculture, industrial manufacturing and environmental management. In manufacturing, the emphasis has shifted from the removal of toxic chemicals in production waste streams to replacement of those pollutants with biological processes that prevent the environment from being fouled. And because these biological processes are derived from renewable sources they also conserve traditional energy resources. Industrial biotechnology companies are the innovators commercializing clean technologies and their progress is accelerating at an astonishing rate.

In agricultural biotechnology, crops on the market have been modified to protect them from insect damage thus reducing pesticide use. Biotech crops that are herbicide tolerant enable farmers to control weeds without damaging the crops. This allows farmers flexibility in weed management and promotes conservation tillage. Other biotech crops are protected against viral diseases with the plant equivalent of a vaccine. Biotech fruits and vegetables are tastier and firmer and remain fresher longer.

The number of acres worldwide planted with biotech crops soared from 4.3 million in 1996 to 100 million in 1999, of which 81 million acres were planted in the United States and Canada. Acceptance of these crops by farmers is one indication of the benefits they have for reducing farming costs and use of pesticides while increasing crop yields.

Biotech crops in development include foods that will offer increased levels of nutrients and vitamins. Benefits range from helping developing nations meet basic dietary requirements to creating disease-fighting and health-promoting foods.

Biotechnology is improving the lives of those in the U.S. and abroad. The designation of January 2000 as National Biotechnology Month is an indication to our constituents and their children that Congress recognizes the value and the promise of this technology. Biotechnology is a big word that means hope.